

**Cooperative Farming
and
Rural Industrialisation
with Reference to Uttar Pradesh**

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INTRODUCTION

My work entitled: "Cooperative Farming and Its Impact on Rural Industries of India with special reference to Uttar Pradesh" was given due recognition by the University Grants Commission and published by the Aligarh Muslim University, Aligarh in the form of a book in 1972 under the University Grant Commission's scheme of publishing Books and Research Studies in the field of Cooperation. The main theme and arguments developed in the original thesis have been substantially retained in present work entitled: 'Cooperative Farming and Rural Industrialisation with reference to Uttar Pradesh.' However, in the light of recent changes in government policy and the development of cooperative farming societies and rural industries, necessary additions and alterations have been made to make the study upto date. In the light of my study I have given my own interpretations and conclusions.

The necessity to undertake this advanced study on Cooperative Farming and Rural Industrialisation was felt due to change of emphasis on cooperative farming in India as a means of rural economic uplift through development of agro-industries. In my previous dissertation entitled "Cooperative

Farming and Its Impact on Rural Industries of India with special reference to U.P.", written under the able guidance of Professor Q.H. Farooquee, Senior Professor and Dean Faculty of Commerce, I have maintained that the cooperative farming societies have not been organised on sound lines and a deliberate shift in state policy is desired to overcome the bottlenecks that impede the development of agro-industries on cooperative farms. This dissertation was approved for the award of the degree of Doctor of Philosophy in Commerce, by the Aligarh Muslim University in 1968.

Cooperative Farming has been a controversial subject in India, for a long time. Some view it as a solution to our problem of small holdings and low productivity. It is a common belief that with the development of farming on cooperative basis new avenues will develop to tackle the problem of rural unemployment. Many economists like Prof. Khusrro, Late Dr. Gadgil consider it to be the remedy of our rural economic problems. Chaudhry Charan Singh, however, holds a contrary view. Members of the delegations who visited Israil, Yugoslavia and China etc. are also divided on the suitability of cooperative farming in India. The Report of the working group on cooperative farming has set the ball rolling in favour of cooperative farming. As a result of the recommendation of this committee the Cooperative Joint-Farming and Collective Farming societies came into existence with full moral and material support of the government.

Dr. Ram Subhag Singh, a member of the working group on cooperative farming in his note remarked "cooperation is an ideal thing. Its chief essence, that is, voluntariness and the spirit of independence from bureaucratic and partisan control are not very much in evidence at present.¹ This aspect needs adequate rethinking. It presupposes a high sense of duty and devotion amongst its members, which will have to be cultivated. This can be possible only when the Government and the public organisations set precedents before the people of their clean and efficient functioning in that direction. The more such atmosphere of confidence is created, the brighter will be the future for the formation and effective functioning of the Joint Co-operative Farming Societies.

In the light of the above observations the present work mainly concerns itself to the analytical study of the cooperative farming visa vis rural industrialisation and evaluates the contribution of ^{co-operative farming and} rural industries in the national economy through increase in agricultural production and providing employment to rural masses. In the course of this study several problems have been critically examined. Some of them are listed below:-

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1. See Report of the Working Group on Cooperative Farming Vol. I Department of Cooperative, Ministry of Community Development and Cooperation, Government of India, December 1959 Page 139.

- a) What are the pre-requisites for effective functioning of the Joint Cooperative Farming Societies?
- b) What lessons India can draw from the experience of foreign countries which claim to have achieved success in this sphere?
- c) How far has the government been successful in developing rural industries on these farms to create employment opportunities and achieve viability?

All these issues have been critically analysed to arrive at definite conclusions. The study has been divided in Seven Chapters.

The first chapter outlines the role of agriculture in the national economy of India with particular reference to the Uttar Pradesh. It examines in detail the shortcomings of the agricultural sector which have stagnated economic growth in the Uttar Pradesh and ultimately of the country as a whole. It has been noted that the crux of U.P.'s problem is her vast number of small cultivators who work on uneconomic holdings and remain idle for more than four months in a year. The facilities available for the improvement of agriculture are beyond the means of the small farmers of U.P. Consequently, agriculture yields poor returns. As a consequence the rural industries are also not developed. Hence, the masses have little opportunities for gainful employment to lead a comfortable life. To meet the situation an institutional change in the agrarian economy of the state through cooperative farming is considered essential.

The Second Chapter is devoted to the historical growth of the cooperative movement in India. The development of this movement under different social, cultural and political situation has been traced. The study reveals that cooperation in the economic sense has never been static. It has changed from time to time according to the needs of a country. Nevertheless, in India we have not followed a genuinely dynamic policy on cooperative farming. Although the number of such societies has increased in the past, they have not fruitfully performed the functions of cooperative farming. Moreover agro-industries have not been developed by these societies to provide whole time employment to the members and landless workers. In this context the broad policies of the government during the plan period have been critically examined. It has been noted that the government has been target conscious and not result conscious.

The third chapter deals with the potentialities and progress of cooperative farming and its impact on rural industries (cottage and small scale) under the Five Year Plans of Uttar Pradesh. It outlines their development under the Fourth Plan. With a view to studying the impact of cooperative farming on rural industries, a case study of societies working in Aligarh district of Uttar Pradesh has been made. The study reveals that cooperative farming societies of Uttar Pradesh are not working on sound lines. They depict a gloomy picture of the cooperative farms and industries which showed little or

no promise of future growth. How to develop genuine cooperative farming societies for the welfare of the rural population must engage the attention of the government and local leaders. The societies have no cooperative touch in their working, management and day to day business. Most of the societies are handicapped due to poor management, inefficient accounting system, lack of supervision on the part of cooperative staff to check utilisation of loans and agricultural inputs provided to these societies. Against the cooperative farms of Aligarh are mostly family farms and were registered mainly to avoid the implications of Land Ceiling Act. The loans granted for developing industries ancillary to agriculture have not been utilised for the purpose. In fact, the cooperative farming societies of Aligarh district are neither genuine cooperatives nor are they economically viable. Their failure has convinced the farmers of Aligarh that cooperative farming is not an effective device to bring about rural prosperity. They hardly serve as model societies.

To make a comparative study of cooperative farming in communist and other countries the fourth chapter deals with the historical background of the development of cooperative farming in USSR, Czechoslovakia, Poland, China, Israel, Uganda, Syria, Nigeria and Iraq. The study confirms that large scale cooperative farming suits communist countries or countries which have some special economic programme of socialist nature and is the outcome of the socio-economic and political

conditions prevailing in these countries. It has also been followed in some other countries that were attracted by the Socialist Philosophy but the degree of success varies from country to country. New measures of land reform recently carried out in the developing countries have created conditions for the establishment of cooperative farms which will take some time to pass through several stages for a peaceful change over towards cooperativization. In the ultimate analysis the study reveals that cooperative farming can deliver goods to the developing nations only to a limited extent on account of the built in defects of the machinery to implement such schemes.

The fifth chapter gives a critical estimate of the development of rural industries in India under various programmes. It examines the progress made by these industries during plan period and underlines their weaknesses. The study shows that the poor performance of the industries has been due to the policy of the government and partly due to the inexperience of rural industrialists. The reasons were mainly financial inadequacy and administrative inefficiency. Although the programme of organising a few selected types of agro-industries on cooperative farms was undertaken in 1963 it was not backed by the allocation of sufficient finances for this purpose. Only instructions were issued to the State Government for favouring the development of industries on cooperative farms. Some help was rendered by the Khadi and Village Industries

Commission, Financial Corporations and Central Cooperative Banks but it was not substantial. The Fourth Plan, however, suggested concrete steps for the development of agro-industries on cooperative farms but their ineffective implementation, and later on cut in the financial resources as well as unsuccessful record of cooperative farming societies have checked the growth of industries on cooperative farms.

In the sixth chapter the impact of cooperative farming on the rural industrial development of Uttar Pradesh has been examined. The study reveals that Uttar Pradesh has not followed any effective policy for the development of agro-industries on cooperative farms. The efforts made after 1963 were half hearted, which could not accelerate the tempo of their progress. A deliberate shift in the State policy is recommended in order to overcome the bottlenecks which impede the development of agro-industries on cooperative farms. On the one hand the existing cooperative farms have to justify their existence while on the other hand the government and its financial agencies have to accept the responsibility of developing them. It is maintained that in their development lies the evolutionary and democratic progress of industrialisation. The reorganisation of agriculture through genuine cooperative farms on selective basis would give rise to the spirit of enterprise necessary for the agro-industrial development in Uttar Pradesh.

The last chapter gives a summary of the study and its main recommendations for healthy growth of the Cooperative Farming and Rural Industries with reference to Uttar Pradesh.

In the preparation of this volume I received invaluable guidance and suggestions from Professor Q.H. Farooquee, who initiated me into research in the field of Cooperation and allowed me the necessary facilities of discussion to illuminate my problem. He also helped me by providing material from his personal library. I am also thankful to Professor K.C. Sarkar and Dr. Otto Schillar who inspired me to work on this subject. Mr. M.A. Qureshi, Secretary, Ministry of Agriculture, Government of India, Mr. J.M. Rana, Director, I.C.A. New Delhi and

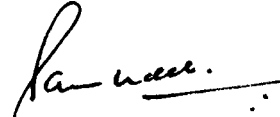
Dr. Dharamvir Jt. Director, I.C.A. New Delhi have always been kind to me in providing the necessary literature and upto date information related to the subject. I owe a great debt of gratitude to them. Messrs Hasan Luqman, Balwant Singh, Shafiq Ahmad Siddiqi, J.N. Chaku and P. Srinavasan have also extended their valuable support in completing this work.

I am also thankful to Professor S. Nasir Ali, Professor S. Maqbool Ahmad, Dr. S. Agha H. Jafri, Dr. S. Irshad Ali, Mr. Sharifur Rahman, Mr. Abdul Farooq Khan, Dr. S.M. Waseem, Dr. Mahfoozur Rahman, Mr. Matloob Khan, Dr. (Mrs.) Abida Samiuddin for their help in the preparation of this volume.

I must also thank for the valuable services of Messrs Saleem Uddin, Hafeez Ahmad, Tousiffullah Khan and Shahzad Ali who typed the manuscript at various stages of this work.

In the end I would like to say that the arguments advanced and opinions expressed in the book are entirely mine and I am responsible for the lapses, if any. I would consider my efforts amply rewarded if the analysis presented in the volume throws some guidelines to the government and the official and non-official cooperators of the country in planning for the development of cooperative farming and agro-industries in India.

March 1st, 1975.


(SAMI UDDIN)

CHAPTER I

THE STATE OF INDIAN AGRICULTURE WITH REFERENCE TO UTTAR PRADESH

The predominance of agricultural activities in India is a well known fact. "Of the total population of the country, 88.9 per cent lives in about 5,50,000 villages and depends mostly on agriculture and only 19.91 per cent constitute urban population!"¹ It is estimated that on agriculture is dependent as much as 70 per cent of the population comprising owner cultivators, tenants, cultivating labourers and agricultural rentiers.² This aspect is also stressed by the Indian Planning Commission in the following words: "The largest portion of the national resources of India consists of land and by far the larger proportion of its inhabitants are engaged in the exploitation of land!"³

In spite of the fact that agriculture is of crucial importance to the country, the agrarian economy today presents, by and large, a picture of inefficiency, low productivity and small units of operation.

In the following discussion an attempt has been made to examine the place of agriculture from the point of view of:

- a). Population engaged in agriculture, and
- b). Agriculture as a basic source of Indian national income.

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1. Directory & Year Book - The Times of India Press, Bombay, 1974-75, p. 332.
 2. Report of the Working Group on Cooperative Farming, Volume I, Department of Cooperation, Ministry of Community Development & Cooperation, Government of India, December 1959, p. 7.
 3. Planning Commission, First Five Year Plan, Govt. of India. Also see 'Role of Cooperatives in the IADP.....contd

PART FIRST

POPULATION—ITS SIZE AND GROWTH

For a clear understanding of the agricultural problems, it is essential to study the total size of the population, its density, its pressure on land and lastly its productivity. It is rightly remarked: "The Indian Union is the scene of dramatic demographic situation in the world today.¹ The estimated total population of India according to 1971 census is 547,942,809 which is 24 per cent higher than the population recorded in 1961.²

The present growth in population is characterised by the high birth rates³ and declining, though still high if compared with advanced countries, death rates. During the post-independence period efforts have been made to reduce the death rate without any effective measures towards birth control. Improvement in public

Programme' (Un-published Research Project, UGC, by the author).

1. Dumont, Rure : Types of Rural Economy, Methuen and Company Limited 36, Essex Street, Strad, London (First Edition published in 1957), p. 159
2. In 1971 & 1972 the birth rate was 38.8 and 38.1 respectively while the death rate was 15.2 and 14.7 respectively - Illustrated Weekly, p. 24.
3. Most reliable estimates point out that the birth
(Bombay)
..contd

health has caused a sharp fall in the death rate without any significant change in the fertility rate. As a result, there has been a steady rise in the annual growth of population. Expectation of life at birth which used to be only 27 in 1920 and nearly 32 in 1945 is now reckoned at 51.3 in case of male and 52 in case of female.¹ With the all round improvement in health conditions, the death rate will fall still further and the expectation of life will increase further. The rate of growth of population is bound to rise unless action is taken on a national scale to bring it down.²

DISTRIBUTION OF POPULATION

According to the Census of 1971 the total rural population of India is 438.8 million out of the total population of 547 million of India.

As regards the number of cultivators and agricultural labourers, it has undergone a change during the period 1941-50, and 1951-60. The strength of cultiva-

. rate in India in 1961 was around 43 and death rate around 21 per 1,000 population. It is estimated that the death rate might decline still further and reach the low level of 10 per 1,000 population by 1980 or so. Birth rate would, therefore, be the crucial factor in determining the future growth of India's population (The Times of India Directory & Year Book 1974-75 - p. 131).

1. Illustrated Weekly - Bombay, Vol XC III, August 13, 1972, p. 25.

2. Planning Commission, Fourth Five Year Plan, Govern-
..contd

tors increased by 43 per cent and that of agricultural labourers by 14 per cent in 1961 over 1951 at all-India level.¹ In 1971 the total number of cultivators and agricultural labourers rose to 78176707 and 474,893,83 respectively.

Thus it is evident that the number of the agricultural proletariat is on the increase. As land is more or less a fixed factor of production, the increase in the number of agricultural workers is bound to create undue pressure on land. Thus, there always remains the problem of the adjustment between the variable phenomenon i.e., constant rise in population and the static phenomenon, i.e., land. The former is increasing in geometrical progression while the latter is showing mathematical progression. Under the circumstances the farmers have to carry on with the subsistence farming which is retarding the pace of agriculture, breeding unemployment and multiplying a class of landless agricultural labourers.

ment of India, New Delhi, p. 347 (also see appendix A)

1. Census of India, 1971.

2. (Agricultural labourers account for 25.76 per cent of the working force and cultivators 42.87 per cent (1971 census) Hindustan Times, August 17, 1971.)

The problem of agricultural labourers has assumed great urgency in India, Their number has increased rapidly while their economic condition has been steadily deteriorating. According to the Census of 1971, the number of cultivating labourers in the country was 78,176,707 constituting about 42.9 per cent of the total population¹. The Second Agricultural Labour Enquiry (1956-57) revealed that total number of agricultural labourers who were actual workers was 35 million. More than half of them were without land, while the rest owned only tiny bits of land, so that even in their case the bulk of their income, i.e., 73 per cent (64 per cent in 1950-51) came from wage employment on other farms. About 85 per cent of the agricultural workers are casual workers and about 15 per cent of them are attached to landowners. According to 1971 census the number of cultivators and agricultural labourers stood at 14,644,677 and 4,196,029 respectively.

The per capita annual income in 1956-57 of these labourers was Rs. 99.4 (Rs. 140.00 in 1950-51) as compared to the national average of Rs. 291.5 in the same year.

1. Directorate of Economics & Statistics, Ministry of Agriculture, Government of India, Indian Agriculture in Brief, XI Edition, p.6.

The average annual income of an agricultural labour household was Rs. 437.00 (Rs. 447.00 in 1951-52). On an average they were employed for 197 days (218 in 1950-51) in the year. About 15 per cent of agricultural workers were attached to landowners. Some 16 per cent of them had no wage-earning employment at all during the year.

The Agrarian Reforms Commission, 1950, has rightly opined "to leave out the problems of agricultural labour in any scheme of agrarian reforms — as has been done so far — is to leave unattended a weeping wound in the agrarian system of the country."¹ The Government of India being aware of the urgency of problem passed the Minimum Wages Act (1948) and took other measures, viz., reclamation of cultivable wastes, encouragement to agro-industries, etc., to relieve the distress of landless agricultural labourers.

The Bhoodan, Gramdan, Sampattidan and Buddhidan has helped the landless labourers to get small piece of land but this is not sufficient for their livelihood. The solution lies in a broad based and well conducted programme of agricultural and industrial development of India.

1. Dewett and Singh: Indian Economic: S.Chand and Co. Delhi, 1966, p.120.

POPULATION PRESSURE ON LAND

The density of population depends upon the climatic conditions, security of life and property, standard of comforts, availability of economic resources, the stages of economic development, etc.

The average density of whole of India was 373 persons per square mile according to 1961 Census. The Census of 1951 shows the average density of whole of India as 321 persons per square mile. However, the density of population is different in different States.

Uttar Pradesh is one of the densely populated States in the country. In 1973 it has a population of 8,83,41,144 persons. Within the State the pressure on land varies, the density being very high in the eastern and western districts of Uttar Pradesh and very low in the hill districts in the Northern Zone and Bundelkhand Region.

The population of Uttar Pradesh has increased by 16.66 per cent during the decade 1951-61 as compared to 11.82 per cent during the preceding decade 1941-51. The increase was much lower than the corresponding all-India increase of 21.50 per cent (in 1951-61). In view of the

paucity of data on vital statistics it is not possible to analyse the causes for the lower growth rate in Uttar Pradesh. However, the National Sample Survey¹ data for rural areas for July 1958-July 1959 indicate that though Uttar Pradesh had a high birth rate compared to all-India it had a relatively much higher death rate. The infant mortality in particular is very high. The higher death rate in the State is the result of poor diet, low nutritional standards and inadequate medical and health facilities.² According to 1971 Census the population of U.P., has increased by 19.82 per cent during 1961-71.³

Again the population of Uttar Pradesh has a higher rural composition compared to all-India. In 1961, 84 per cent of the State's population lived in villages compared to 74 per cent in all-India. The size of the villages is small in Uttar Pradesh. The villages

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1. National Sample Survey, 14th Round, July 1958 - July 1959, pp. 40-45
 2. Techno-Economic Survey of Uttar Pradesh, National Council of Applied Economic Research, New Delhi, p. 6.
 3. Census of India 1971, Series I, Part I, of 1971, Supplement, p.78.

embrace 21 per cent of the total population of the State as compared to 17 per cent population of all-India average. As a result of such a distribution of population each urban centre in Uttar Pradesh has to serve a much larger number of villages (192 villages for each town in Uttar Pradesh) as compared to all-India (85 villages per town). This indicates that marketing facilities for the collection of agricultural produce from the rural areas as well as for the distribution of essential commodities in those areas from the town have to be organised more extensively in Uttar Pradesh. This situation calls for a relatively larger investment in providing good net-work of transport and communication facilities in the countryside. The proportion of urban population in Uttar Pradesh is relatively less compared to India as a whole. This reflects the comparatively lower degree of industrialisation in the State.¹ Particularly in Eastern Uttar Pradesh the urbanisation is the lowest in the State.

As a result of it, the occupational distribution of population in Uttar Pradesh is heavily biased in

1. Techno-Economic Survey of Uttar Pradesh, op. cit., p. 6.

favour of agriculture. Most of the workers (75 per cent) are engaged in agricultural occupations.¹

The table No. 1 shows quite a heavy pressure of population* on agriculture. It is an indication to the fact that in other fields the employment opportunities have not been tapped due to poverty and lack of confidence. The farmers are resigned to fate. It is being proved that when there is pressure of population on the means of subsistence, poverty tends to be self perpetuating. Uttar Pradesh's percentage of workers is the highest while their employment in non-agricultural occupation is the lowest. In view of high density of population, poor yields and growing unemployment, it is necessary to reorganise agriculture and develop cottage and small scale industries for providing better opportunities to the rural folk. These industries will not only supplement the meagre income of the farmers but will also develop an evolutionary process of industrialisation in the State.

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1. Fourth Five Year Plan - Uttar Pradesh, (English), p. 6.
 2. Density of population per km. in U.P. is 300 while it is 268 in Punjab, 225 in Haryana and 94 in Madhya Pradesh (Census of India 1971).

TABLE 1

Livelihood Pattern in Uttar Pradesh and India (1961)

	Uttar Pradesh		India		Percentage of total workers in U.P.	Percentage of total workers in India
	Persons % of total Population	(000)	Persons % of total Population	(000)		
Cultivators	18.428	24.99	99.50	22.70	63.89	52.82
Agricultural Labourers	3.261	4.42	31.482	7.18	11.30	16.71
Mining, Quarrying, Live-stock, Forestry, Fishing, Hunting, Plantations, Orchards and allied activities.	0.500	0.68	7.121	1.63	0.60	3.78
Household Industries	1.474	2.00	10.100	2.30	6.24	5.36
Manufacturing--other than Household industries	0.801	1.09	7.957	1.82	2.78	4.22
Construction	0.214	0.29	2.056	0.47	0.74	1.09
Trade and Commerce	1.063	1.44	7.640	1.74	3.68	4.05
Transport, Storage and Communication	0.399	0.54	3.003	9.69	1.38	1.59
Other Services	2.710	3.67	19.548	4.46	9.39	10.38
TOTAL WORKERS	28.850	39.12	188.417	42.99	100.00	100.00
NON-WORKERS	44.896	60.88	249.893	77.01	...	...
Total Population	73.745	100.00	438.310*	100.00	...	...

*Excluding Goa, Diu and Daman and some portions of N.E.F.A.

N.B. : In Uttar Pradesh 3.28 lakh workers from the household industries group as given in Census have been transferred to category 3, Similarly, 19.31 lakh workers have been transferred in case of India.

SOURCE:

Census of India, Paper No. 1, of 1962, Final Population Totals, p. 1009

Let me now consider briefly the contribution of agricultural sector to the total national income. For this purpose the study of national income after 1947 is most important because it reveals the tempo of development after independence. The following table gives the details of agricultural income, non-agricultural income, total income and percentage of agricultural income:

TABLE 2

Estimates of National Income of
Four Year Period
(from 1947-48 to 1950-51)

(In crores)				
Year	Agricultural Income.	Non-agricul- tural Income.	Total Income.	Percentage of Agricultural Income.
1947-48	42			
1948-49	4,250	4,400	8,650	49.1
1949-50	4,490	4,520	9,010	49.8
1950-51	4,890	4,640	9,530	51.3
=====				

SOURCE: Yousuf. M., the Study of Agriculture in India's First Five-Year Plan, unpublished Thesis, Department of Economics, Aligarh Muslim University, Aligarh, 1963, p.5.

The Second Five-Year Plan states the growth in income (1951-56) at 1951-53 prices as follows:¹

TABLE 3

Estimated Growth in National Income 1951-56
at 1952-53 Prices
(at the end of period)

1st Plan	2nd Plan	3rd Plan	4th Plan	5th Plan
1951-56	1956-61	1961-66	1966-71	1971-76
10,800	13,480	17,260	21,680	27,270
=====				

According to the above given estimates the National income would have been doubled by 1967-68. But the Second and Third Five Year Plans could not maintain a steady record of progress. Hence the targets of increasing national income could not be achieved. The national income during the period 1960-61 to 1970 indicates the slow growth (See Appendix).

1. The Second Five-Year Plan, Planning Commission, Government of India, p.11. The Fourth Five Year Plan points out that in view of factors like adverse weather, delays in securing external credits or in implementation and other unforeseen development, it may be prudent to allow for a margin in the estimate of increase in national income over the Fourth Plan period, likely national income in 1970-71 may, therefore, be put at about Rs. 29500 crores at 1965-66 prices, i.e. an increase of 38 per cent over the 1964-65 level (See Fourth Five Year Plan, Planning Commission, Government of India, p. 61).

INCOME OF UTTAR PRADESH

Per capita income is one of the most significant indicators of the economic well being of the people. Therefore, a study of per capita income and variations in it during different periods of planning help in assessing the development activities. At the commencement of the First Plan (1950-51) the per capita income of U.P. was Rs. 260 as against Rs. 247.5 for the country at the constant prices of 1943-49. After a decade viz., at the end of the Second Plan, the State's per capita income was Rs. 246 as against Rs. 306.6 for the country at the constant prices of 1960-61. It is true that the per capita income of 1950-51 is not directly comparable with that of 1960-61 as the base for the two years happens to be different. Even so, these figures at least indicate the gap between the State and the country. There is, however, no such difficulty of comparison after 1960-61 as the constant prices of 1960-61 constitute the base for the subsequent years. At the end of the Third Plan, while the country's per capita income rose to Rs. 307.3 in the case of U.P. it came down to Rs. 245. In 1966-67 the State's per capita income fell to Rs. 228 as against Rs. 302.4 for the country. Its main reason was the fall in agricul-

tural production due to the drought. In the year 1967-68, the per capita income in the State rose to Rs. 247 against a corresponding increase of the national per capita income to Rs. 312.3.

For having a comparative view of the prosperity of different States of the Union, Statement III was prepared to show the per capita income of various States at current prices. If we take the figures relating to 1964-65, for which the data are available for most of the States, it would be seen that the per capita income of U.P. was Rs. 372. Only three States, viz. Kerala, Orissa and Bihar, had lower per capita incomes, in comparison to Uttar Pradesh.

Per capita income is a derivative from the total State income. It will, therefore, be useful to give the figures relating to the State income also. The total income of U.P., in 1950-51 at 1948-49 prices was Rs. 1,632 crores which formed 18.4 per cent of the National income of Rs. 8,850 crores. Against this, in 1960-61 the income of U.P. was Rs. 1,799 crores at 1960-61 prices i.e., 13.5 per cent of the National income of Rs. 13,308 crores. In 1965-66 this share in terms of 1960-61 prices went down to 13.3 per cent. By 1967-68 it fell further to 12.8 per cent, when the State income of U.P. was Rs. 2,107 crores against Rs. 16,525 crores for the

country. Thus, the share of the State in the national income which was a little higher than its share in the country's population in 1950-51 has been continuously decreasing. During the seven year period ending 1967-68 the State income showed an annual growth rate of 2.28 per cent. As the rate of population increase (2.21 per cent) in the State during this period was almost the same as the growth rate in income, the per capita income in the State has, on the whole, remained around the same level.

As regards the comparative growth rates, the average annual growth rate of the State income at constant prices of 1960-61 was 2.28 per cent as against 3.14 per cent of the country during the period 1960-61 to 1967-68. Sectorwise, the growth rate at the State level in the primary sectors was 1.23 per cent during the seven-year period ending 1967-68. Due to poor crops in the preceding year of 1966-67, the income of primary sectors had gone down by 8.3 per cent from the 1960-61 level. This was not true of U.P. alone. Even at the National level the income of primary sectors was 6.00 per cent less than the 1960-61 level. In the secondary sectors the annual growth in the State was 4.56 per cent till 1967-68

as against the corresponding rate at the National level of 4.63 per cent.¹

The low per capita income in the State is an indicator of the fact that U.P.'s economy is still undiversified. As against the all-India percentage of 22.7 engaged as cultivators, the percentage for U.P. is 25.00. The corresponding figures for Kerala, West Bengal, Punjab and Madras are 7.0, 12.8, 14.4 and 19.2 respectively.²

According to the estimates of the Uttar Pradesh Government net income of Uttar Pradesh was Rs. 1,913 crores in 1960-61.³ The value of net output originating in Uttar Pradesh in 1960-61 was about Rs. 2,197 crores according to the estimates of National Council of Applied Economic Research.⁴ (see table No.4)

1. Fourth Five Year Plan U.P., Government of Uttar Pradesh, Planning Department pp. 19-21

2. Ibid, p.21

3. Fourth Five Year Plan (Draft Outline,), p. 3.

4. Monthly Bulletin Statistics, Government of U.P., May 1966, p. 499.

TABLE 4

State Income in Uttar Pradesh and India for 1960-61

(in Rs. crores)				
Sectors	Uttar Pradesh	Percentage.	India	Percentage.
(A) AGRICULTURAL AND ALLIED	1,495.07	68.1	2,616	52.0
Agriculture	1,033.56	47.0	6,241	42.6
Animal Husbandry	445.97	20.4	1,166	8.0
Forestry	14.69	0.7	142	1.0
Fisheries	0.85	Neg	67	0.4
(B) MINING AND SECONDARY ACTIVITIES	194.30	8.8	2,316	15.8
Mining	1.70	0.1	129	0.9
Factory Enterprises	70.80	3.6	2,006	13.7
Non-Factory Enterprises	96.64	4.3		
(a) Non-household	48.25	2.1		
(b) Household	48.39	2.2		
Construction	17.08	0.8	181	1.2
(C) TERTIARY ACTIVITIES	507.51	23.1	4,721	32.2
Railways	27.49	1.3	276	1.9
Communications	7.55	0.3	66	0.4
Other: Transport, Storage etc.	33.19	1.5	283	2.0
Trade & Commerce	150.22	6.8	1,677	11.4
Other services	230.29	10.5	2,040	13.9
House Property	58.79	2.7	379	2.6
NET DOMESTIC PRODUCT.	2,196.88	100.0	14,653	100.0

SOURCE: For details of methodology, see the NCAER publication, Distribution of National Income by Stages, 1960-61. Since the computation of these estimates the figures for Uttar Pradesh have undergone marginal revision to Rs. 2,193 crores as given in the above publication. In 1969-70 the States income at constant prices of 1960-61 was 2,261 crores and per capita income at constant prices of 1960-61 was Rs. 253.

It is clear from the above table that the economy of the State is heavily dependent on agricultural and allied activities which contribute 68.1 per cent to the total net output as compared to 52 per cent in the country as a whole.

The high density of population coupled with the dependence of nearly three-fourth of its total population on agriculture, and the very low productivity of land has resulted in a low per capita income in the State. (Thus in 1960-61, per capita income was only Rs. 245.88 while the All India average per capita income was 310. In 1966-67 the per capita income fell down to Rs. 228, while the All India average rose to Rs. 313. In 1971 the per capita income again rose to Rs. 297.35 while the All India average stood at Rs. 334.54¹).

CONCLUSION:

From the above discussion it is clear that although agriculture is a source of livelihood to a majority of population in the rural as well as in urban sectors but its progress is highly unsatisfactory due to excessive dependence on agriculture. The land-man ratio is rapidly changing against agriculture. The tertiary and agro-based industries are lagging behind the population growth. High pressure of population is breeding poverty amongst the agriculturists of Uttar Pradesh. As a consequence the target of growth in national income could not be achieved.

1. Directory & Year Book, The Times of India Press Bombay, 1974-75, p. 133.

The reasons which were responsible for the tardy growth^{in agriculture} are analysed in the second part of this chapter.

PART SECOND

PROBLEMS OF AGRICULTURE

In spite of predominance of agriculture from the point of view of employment and its contribution in national income, agriculture today presents a poor picture and consequently, Indian farmer lives on subsistence level.

Particularly, in Uttar Pradesh due to low productivity, sub-division and fragmentation of land, ineffective land reform, insufficient supply of agriculture credit, the small agriculturists are leading a miserable life.

(a) LAND PRODUCTIVITY¹

It has been established beyond doubt that agriculture is of crucial importance to the life of our country. When economics of underdeveloped countries begin to get geared to the process of economic development, they pass through a period of stresses and strains. Chief among these is the stress on agriculture which is fully extended and is called upon to increase the quantity

1. We have taken the simplest concept of productivity
,,contd

and improve the quality of its output. Over~~and~~ and above the normal requirements of food crops for direct consumption by all and non-food crops for the use of such industries as already exist, agriculture now has to meet many additional needs.¹ But our agrarian economy today presents, by and large, a picture of low productivity and inefficiency.

In comparison with some of the neighbouring countries in Asia, our production per hect^are has been very low, compared to countries in Europe, it is lower still. The figures given in table 5 indicate comparative average yields per hect^are of some important crops.²

which is relevant to our present conditions. viz., productivity per acre hect^are.

1. Khusro and Agarwal, the problems of cooperative farming in India, Asia Pub. House, Bombay, p.1.
2. F.A.O. Year Book, 1963.

TABLE 5

COMPARATIVE PRODUCTIVITY OF SELECTED CROPS

Country		Yield per hec. (in 100 kg.) (A hectare = 2.47 acres)^	1968*
1.		2.	3.
West Germany	Wheat	34.8	N.A.
U.S.S.R.	...	10.5	13.9
U.K.	...	43.5	35.5
U.S.A.	...	16.9	19.2
India	...	8.9	11.0
U.A.R.	...	26.1	25.6
Japan	...	25.4	N.A.
Italy	...	20.9	22.4
WORLD AVERAGE	...	12.6	-
Italy	Rice	54.9	-
U.S.S.R.	...	21.9	34.1
U.S.A.	...	41.8	49.6
India	...	13.8	16.1
Japan	...	52.6	57.2
U.A.R.	...	58.4	51.1
Australia	...	60.3	N.A.
Burma	...	15.9	17.1 ⁴
WORLD AVERAGE	...	19.9	
U.S.S.R.	Cotton	6.2	8.5
....contd			

6	1.	2.	3.
U.S.A.	Cotton	5.1	5.8
India	...	1.2	1.2
U.A.R.	...	6.6	7.1
Sudan	...	3.5	3.8
Turkey	...	8 3.7	6.1
Peru	...	6.1	N.A.
Mexico	...	6.4	7.3
WORLD AVERAGE		3.3	N.A.

* See Government of India, Indian Agriculture in brief XI Edition, Directorate of Economics & Statistics, Ministry of Agriculture 1971, page 209-212.

SOURCE: F.A.O. Year Book, 1963 (Also see Appendix figures regarding 1968 are taken from above.)

Although India has 14.6 per cent of the world's population it accounts for only 9 per cent of the world's foodgrain and internal production of foodgrains has to be supplemented by imports to feed the population. As pointed out earlier in a developing economy the investment activity both in the public and private sectors of the economy enhances employment and money incomes. Consequently the demand for food increases quantitatively and qualitatively. In addition to this, in India population has also been rising at a faster rate and substantial shifts in population from the rural to urban sector have occurred without development in productivity of farms. Consequently the production of foodgrains has failed by the large margin to match the demand.¹

1. Khusro and Agrawal, op.cit., p. 3.

The record output of 73.5 million tonnes of foodgrains during 1948-59 represents a less than 8 per cent increase over the output recorded as early as 1953-54, but the population has increased by about 9 to 10 per cent since 1953-54. As a result of it per capita production of foodgrains declined and the country relied upon imports of foodgrains. (see Appendix C)

Taking into consideration the likely increase in demand by the end of Fourth Plan for foodgrains and other related factors efforts were made to step up foodgrains production to 120 million tonnes by the end of the Fourth Plan. Being aware of the future foodgrain requirements of the country, the Planning Commission has taken steps to augment production. On the basis of new resources following production estimates have been made for India (Table E).

"The realisation of these estimates would result in a compound rate of growth of 5.59 per cent ^{per} annum in agricultural production 5.82 per cent in the case of foodgrains and 5.01 per cent in the case of non-foodgrains. The yield per acre is expected to go up by about 26 per cent in the case of foodgrains, 20 per cent in the case of oilseeds, 14 per cent in the case of sugarcane. 30 per cent in the case of cotton and 13 per cent

in the case of jute.¹

But in spite of the great emphasis on agriculture the production has not increased according to the expectations during Fourth Five Year Plan. Rather a 9.5 per cent decrease in food production was recorded during 1972-73 over 1971-72 production.² Hence imports of foodgrains from other countries continued.³

TABLE 6
PRODUCTION OF PRINCIPAL CROPS

Crops	(thousand tonnes)		
	1950-51	1970-71*	1971-72**
1.	2.	3.	4.
Rice (cleaned)	20,576	42,225	42,735
Jowar	5,495	8,105	7,753
Bajra	2,595	8,029	5,357
Maize	1,729	7,486	5,026
Ragi	1,429	2,155	2,167
Small millets	1,750	1,988	1,582
.....contd			

1. Fourth Five-Year Plan (Draft Outline), p. 46

2. Directory and Year Book - Times of India, 1974-75, p. 25.

3. India has imported Rice, Wheat, Wheat Flour and other Cereals from various countries. In 1965, 1970, 1972 the total imports of these items were to the tune of 7642, 3631 and 447 thousand tonnes respectively (see India 1974, Publication Division Ministry of Information and Broadcasting, Government of India, p. 176.

..contd

1.	2.	3.	4.
Wheat	6,462	23,832	26,477
Barley	2,378	2,784	2,501
TOTAL CEREALS	42,414	96,604	93,598
Gram	3,651	5,199	5,106
Tur	1,719	1,883	1,574
Other pulses	3,041	4,736	4,378
TOTAL FOODGRAINS***	50,825	1,08,422	1,04,656
Potatoes	1,660	4,807	4,834
Sugarcane (cane)	57,051	1,26,368	1,15,378
Black pepper	21	26	26
Chillies (dry)	351	520	439
Ginger (dry)	15	30	34
Tobacco	261	362	409
Groundnut (nuts in shell)	3,481	6,000	5,712
Castorseed	103	136	144
Sesamum	445	562	459
Rapeseed and mustard	762	1,976	1,451
Linseed	367	474	519
Cotton(lint)('000 bales) ⁺	2,875	4,499	6,526
Jute (dry fibre)('000 bales) ⁺	3,309	4,938	5,711
Mesta (dry fibre)('000 bales) ⁺	N.A.	1,255	1,127
Tea	275	422	433
Coffee	25	110	101
Rubber	14	92	69
Coconut (crore nuts)	358	608	609

* Partially revised estimates.

** Final estimates

*** During 1973-74 the total production of foodgrains was 103.6 million tonnes as against 114 million tonnes assumed by the Planning Commission (Hindustan Times February 20, 1975).

N.A. Not available

+ 180 kg each.

SOURCE: India, 1974, Publication Division, Govt. of India p.

India has also imported two million tonnes.

The government has taken several measures to boost up agricultural production and save foreign exchange resources. The important measures are development of High Yielding varieties, supply of fertilizers and credit facilities, expansion of irrigation facilities, establishment of different financial agencies to help guide and provide assistance to farmers. Not only this but the state governments have been active in passing different Acts regarding consolidation of holdings, ceilings and procurement of foodgrains. The basic facilities like ware housing, transport have also been increased. Reclamation of land, supply of fertilizer agricultural pesticides and development of technical know-how has also been given due consideration. Due to active involvement of the central government in the agricultural development programmes undertaken by the state governments and efficient handling of situation by the officials of the central & state governments, it is expected that during 1974-75 the foodgrains production will be 120 million tonnes* In order to boost up agri-

U.S.S.R. in 1974 (Hindustan Times, January 9, 1975)

During the current year 1975-76 a total of 8.03 lakh tonnes of wheat has been purchased on commercial basis from the U.S.A. at prices ranging from \$ 140 to \$ 150 per metric ton F.O.B. U.S.Port (Hindustan Times, February 20, 1975, p.4).

* Hindustan Times, February 12, 1975.

cultural production an expenditure of Rs. 1088.9 crores was made on agriculture during third plan. In 1969-70, 1970-71 and 1971-72 the actual expenditure on agriculture amounted to Rs. 320, Rs. 390.88 and Rs. 538.25 crores respectively as indicated below:

TABLE — 7

EXPENDITURE ON AGRICULTURE

(Rs. crores)				
Programme	Third Plan expenditure	1969-70 actual expenditure	1970-71 actual expenditure	1971-72 actual expenditure
1.	2.	3.	4.	5.
1. Agricultural production including research and education.	202.5	56.48	64.46	91.49
2. Development of small farmers & agricultural labourers	-	0.12	4.04	10.62
3. Food processing & subsidiary food	22.41	0.91	0.95	0.18
4. Minor irrigation	270.1	94.33	97.79	102.50
5. Soil conservation	77.0	29.42	31.05	32.07
6. Area development	2.3	3.01	7.69	8.51
7. Animal husbandry	43.4	8.79	11.94	14.65
8. Dairying and milk supply	33.6	6.41	9.52	16.84
...contd				

1.	2.	3.	4.	5.
9. Fisheries	22.5	7.62	10.57	10.14
10. Forests	46.0	13.91	14.96	19.04
11. Warehousing, marketing and storage	27.4	12.33	18.79	17.04
12. Central support to financial institutions(agri.sector)	-	27.00	47.60	74.44
13. Buffer stocks of agricultural commodities	-	17.00	8.00	50.00
14. Cooperation	75.6	22.29	38.18	64.98
15. Community Development	276.8)	21.10	25.34	25.84
16. Panchayats	11.7)			
TOTAL	1,088.9	320.00	390.88	538.25

SOURCE: India 1974, Publication Division, Ministry of Information and Broadcasting Government of India, p. 174.

The Total production of foodgrains in 1971-72 suffered a setback because of unfavourable weather conditions in several parts of the country. The production, which had risen from 9.9 crore tonnes in 1969-70 to 10.8 crore tonnes in 1970-71, declined to 10.5 crore tonnes in 1971-72. Production of coarse grains, mainly grown under rain-fed conditions and partly on semi-arid and arid lands, fell by 64 lakh tonnes in 1971-72 as compared to the previous

year. On the other hand, production of wheat rose from 2.38 crore tonnes in 1970-71 to a record level of 2.65 crore tonnes. Rice production also increased by 5 lakh tonnes to the level of 4.27 crore tonnes.

The food situation in the country was rather difficult in 1972 as a result of the setback in foodgrains production of over 30 lakh tonnes in 1971-72 and more particularly because of the extensive damage to the 1972-73 Kharif crops resulting from erratic and scanty rainfall and drought conditions in several parts of the country. Scarcity conditions were experienced in varying degrees in a number of States; the worst affected areas were in Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Rajasthan.

Market arrivals not being adequate, foodgrain prices rose throughout the country, particularly in the second half of 1972. The all-India wholesale price index for cereals went up by nearly 11 per cent. Though procurement was marginally lower, public distribution of foodgrains was substantially stepped up resulting in the depletion of stocks.

Towards the end of 1972, arrangements were made to import 20 lakh tonnes of foodgrains on commercial terms

to replenish the buffer stocks and to ensure uninterrupted flow of supplies through the public distribution system.¹

LAND PRODUCTIVITY IN UTTAR PRADESH:

Uttar Pradesh enjoys certain physical and climatic advantages conducive for the development of agriculture which are denied to a number of neighbouring States. Rainfall in most parts of the State, though not fully adequate for the year-round cultivation, is much higher than in the adjoining States of Punjab, Rajasthan and Madhya Pradesh. Irrigation facilities, have been developed on a fairly good scale.² But the agricultural development of Uttar Pradesh has not been commensurate with these facilities. As a result of it U.P. has been categorised as a self-sufficient area instead of being a surplus state like Madhya Pradesh, Punjab, Haryana Andhra Pradesh etc.³

The basic cause for the backwardness of agriculture is low productivity of land. In the case of rice, maize, barley, grain, groundnut, cotton and sugarcane. the per acre yield in the State is below the national average and very much lower than that obtained in the neighbouring States such as Punjab and Rajasthan where agricultural conditions are similar.⁴ The average yield

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1. India 1974, Publication Division, Ministry of Information and Broadcasting Government of India, p. 175
 2. Techno-Economic Survey of Uttar Pradesh, op.cit., p.20
 3. Directory & Year Book 1974-75, The Times of India Press Bombay, p. 40.
 4. Techno-Economic Survey of Uttar Pradesh, op.cit., p.21

of wheat, jawar, bajra, millets and potato in Uttar Pradesh though higher than the all-India average is lower than that in other states. The average yield per acre of wheat, the predominant crop of Uttar Pradesh, was only 712 lbs. in 1958-59 whereas in Punjab and Rajasthan they were 959 lbs., and 788 lbs., respectively. The low yield of wheat in Uttar Pradesh has a depressing effect even on the overall national production of this crop because nearly one-third of the all-India production is in this State. The performance of Uttar Pradesh in the case of the other important cereal, rice is even worst, the per acre yield was a bare 535 lbs., as against 851, in Punjab and 654 lbs., in Rajasthan in 1973-74.

As a result of it in 1960-61 the net value of agriculture output per acre of gross cultivated area was nearly Rs. 167.00. Although it is slightly higher than Rs. 161.00 for all-India level for the same year, is quite low in absolute terms and also considering the fact that Uttar Pradesh has a much larger area both under irrigation and double cropping.¹

In Uttar Pradesh the productivity of land varies from region to region depending on the fertility of soil, rain-

1. Techno-Economic Survey of Uttar Pradesh, op.cit., p. 20.

fall and irrigation facilities.

As a result of regional disparity the progress of agriculture is uneven and overall picture of agricultural productivity is alarming. The overall slower growth rate of agricultural output in Uttar Pradesh as compared to all-India was confirmed by the study made by Ministry of Food and Agriculture.¹ According to this study during 1952-53 to 1961-62 the linear growth rate per all crops in Uttar Pradesh was 2.23 per cent as against 2.23 per cent for the entire country. This rate for foodgrains was 1.58 per cent for Uttar Pradesh as against 2.66 per cent for the entire country, and for non-food grains 4.57 as against 4.40 per cent for whole of India.

A comparative study of production per Hectare can be made from the following, for the year 1973-74.

TABLE - 8
Production Per Hectare in India & U.P.
During 1973-74

Crop	(in Kgs.)	
	All India	Uttar Pradesh
1. Rice	1,151	895
2. Wheat	1,158	933
3. Gram	521	536
..contd		

1. For details see: Ministry of Food and Agriculture, Government of India. Growth rates of agricultural Production (All-India and States), Draft Mimeographed document, April, 1964.

4. Maize	937	741
5. Jowar	530	686
6. Bajra	519	760
7. Small Millet	411	557
8. Barley	387	903

SOURCE: Compiled by the author from the records of the Ministry of Agriculture, Government of India, New Delhi.

DISTRIBUTION OF LAND—INDIA

Distribution of land effects the per capita agricultural production. In India the pressure of human numbers on land has grown rapidly and the land-man ratio has become so unfavourable that it now stands at less than one acre per person when all agricultural land is spread over the total population and at about 1.5 acres per persons when it is spread over the cultivating population. The average size of operational holding per household has gone down to 5.70. However, it varies from region to region as shown in the following table.

TABLE — 9

Average Size of Operational Holding in different Zones of India

S.No.	Zone	Net area sown per male cultivator (acres)
1.	North India	2.8
2.	East India	3.2
3.	South India	4.8
4.	West India	8.1
5.	Central India	6.5
6.	North-West India	5.2
	ALL INDIA	4.9

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SOURCE: Census of India (1961 Census), Paper I of 1962, p. 435.

Note: According to the Fourth Five Year Plan(U.P) the average agricultural holding in U.P. is 1.86 hectares as against the National Average of 2.69 hectares. The Directory & Year Book, Times of India, Bombay 1974-75 mentions that the average size of holding for the whole of India is 2.63 hectares and for U.P. it stands at 1.78 hectares.

The size distribution of holdings shows serious lopsidedness and nearly two-fifth of the cultivating

families appear to be living on a holding of less than 2.5 acres each.

The last straw is the fragmentary nature of even these pocket sized holdings, a holding being scattered into three, four, five or more plots.

Moreover, due to defective tenurial system large chunks of land had historically passed into the hands of absentee administrators (the Jagirdars who collected land revenue) and absentee owners (the Zamindar who collected rents from the cultivators). Surpluses accrued in their hands and as this class of landlords, like its counterparts in many other countries, have been

Spent on conspicuous consumption, these surpluses never had a chance of being saved and ploughed back into agriculture. Land, in other words, got neglected from the side of owners and administrators. On the other hand, the cultivators, who operated but did not own the land, suffered from serious insecurity of tenure. They could be evicted by the land-owners at any time the latter desired and this uncertainty prevented them from taking a long term view of the situation and investing in land even if they had some surplus. They neglected most of the durable operation-leveelling, bunding, drainage, irrigation, fencing etc., and lived from hand to mouth, getting what

they could in the very short run. There was little investment, then, from this source either and the net result has been declining productivity. In so far as pressure of population and the excessive demand for land in relation to supply has created a high rent structure, the surplus in the hands of tenant - cultivators dwindled down further. Incentive and capital formation is less for this reason as well.

The second set of disincentives which relates to the tenurial system is, of course, not of universal application. They relate only to the zamindari and jagirdari tenures and to such ryotwari lands on which tenancy had arisen and cultivation had got separated from ownership. But all this is a relatively small part of the agricultural area. The country remains by and large a country of owner cultivators. But even these suffer serious disincentive owing to the first set of causes, that is, those associated with an unfavourable land-man ratio, a lopsided size distribution of holdings and unbridled subdivision and fragmentation.¹

As the population increases, the holdings are getting further sub-divided which in turn is resulting in further swelling the ranks of agricultural labourers.

1. Khusro & Agarwal, Problems of Cooperative Farming in India, Asia Publication House Bombay, pp. 9-10

The result of all this is that the village society is not the cohesive structure today as it was in the past and has become merely a unit of neighbourhood in which each family pursues its own individual interest. Joint family which provided the facilities of division of labour and sense of security are being divided into smaller ones. The caste system which once facilitated division of labour now comes in the way of mobility of labour from one occupation to another. With the decline of village arts and crafts, opportunities of self-employment have been curtailed and income reduced. The inherent dis-economies of fragmented holdings, inadequacy of credit and other production requisites, lack of facilities on fair and convenient terms, and absence of knowledge of improved methods of farm operations and land management have put the small farmers in a disadvantageous position to carry on intensive cultivation for getting more from the same piece of land.

In order to avoid further decrease in the size of holding thirteen states have already undertaken legislation for the consolidation of holdings. By the end of 1972, about 34.4 million hectares of land has been consolidated. In U.P. about 10.66 million hectares of

land was consolidated by 1972.¹ To consolidate scattered holdings of a landlord in compact block and retain further fragmentation of sub-holdings, legislations have been enacted by state governments with the exception of the Andhra area of Andhra Pradesh, Kerala & Tamil Nadu. The laws of Gujarat, Madhya Pradesh & West Bengal provide for consolidation on a voluntary basis on application of land holders. In other states the law provides for compulsory consolidation. In Haryana and Punjab the consolidation of holdings has almost been completed. The work of consolidation has made some progress in Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Delhi and Uttar Pradesh. By 1972 about 326 lakh hectares land was consolidated.²

Uttar Pradesh is one of the densely populated States in India. Its economy is mostly agricultural. In 1971 it had 300 persons per square km., as against 182 in India and about 85.6 per cent of the population was living in rural areas as compared with 80.13 per cent in India³ Moreover, the size of the villages is small and one town serve to as many as 192 villages.

1. Directory & Year Plan, Times of India Press, Bombay, 1975, p. 27.

2. India 1974, Ministry of Information & Broadcasting, Government of India, pp. 186-187.

3. The growth rate of rural population in 1971 in comparison to 1961 was 18.25 per cent while the total percentage growth rate in U.P. was 19.82 per cent.

The low per capita income is due to low labour productivity for which one of the main reasons is a relatively greater predominance of the less productive agricultural sector. One of the arguments advanced by the State Government¹ for the low per acre yield of crops in Uttar Pradesh is that owing to the small size of holdings a vast majority of the land holders are unable to put in the necessary inputs. The average size of holdings is also relatively small.

Another serious problem is the fragmentation of land due to defective inheritance law and importance of land due to its social value. The seriousness of the problem of fragmentation can be noted from the following table:

TABLE - 10

Fragments per Holding and
Per Acre

Size Group (acres)	UTTAR PRADESH	
	Number of Fragments Per Farm	Per Acre
1.	2.	3.
Under 2.5	3.60	2.02
2.5 - 5.0	6.26	1.67
5.0 - 7.5	8.94	1.44

..contd

1. Vide the letter of Government of Uttar Pradesh, addressed to the NCAER, dated the 25th May, 1964.

1.	2.	3.
7.5 - 10.0	1.90	1.34
10.50- 15.0	11.76	1.02
15.0 - 20.0	16.10	0.97
20.0 - 25.0	22.89	1.02
Above 25.0	24.85	0.60

SOURCE: Farm Management Studies (quoted in the 'Problems of Cooperative Farming in India', Khusro & Agarwal, p.9.)

The consolidation of holdings programme has helped in the solution of the problem of fragmentation of land to some extent.

In order to improve the economy of Uttar Pradesh various measures have been taken during the period beginning from 1950-51. For example, 9 lakh acres of barren and uncultivable land has been converted into cultivable land and efforts have been made to increase yield per acre (see the following table). It has been estimated that during the period 1960-61 to 1975-76 more land will be available for agricultural purposes. Schemes are underway to reduce the quantity of barren and waste land (see the following table) by 1975-76.

TABLE — 11/

	1950-51	1960-61	1970-71
1. Total land which can be utilised for cultivation (including net area sown and current fallow*)	21,324	21,198	21,439
2. Percentage of net area sown to total land which can be utilized for cultivation.	76.1	81.1	80.9
3. Percentage of current fallow to net area sown	6.4	10.1	4.8
4. Land which can be still utilised for cultivation	23.9	18.9	19.1

* This includes culturable waste, permanent pastures and other grazing land, land under miscellaneous tree crops and groves, other fallow land, net area sown and current fallow.

SOURCE: Draft Fifth Five Year Plan Uttar Pradesh, Vol.I, Planning Department, Uttar Pradesh, p.18.

TABLE — 12

Land Utilisation in Uttar Pradesh (Area in Lakh Acres)

	Area in 1960-61	Estimated area in 1975-76	Increase(+) or decrease(-) in area 1975-76 over 1960-61
1.	2.	3.	4.
Geographical area	729	729	--
Land put to non-agricultural uses	47	47	--

1.	2.	3.	4.
Barren and waste land	69	29	-40
Forest area	94	109	+15
Pasture & grazing land	1	5	+ 4
Land under miscellaneous trees and groves	18	19	+ 1
Fallow land	35	8	-27
Net sown area	425	472	+47
Area sown more than once	112	380	+268
Gross sown area	537	852	+314

SOURCE:(1) For data in 1960-61 - Secretary, Board of Revenue, Government of Uttar Pradesh, (also see Appendix C)

(2) For data in 1975-76 - NCAER estimates.

In view of the importance of enlarging the size of farm the consolidation of holdings scheme was introduced in 1954-55, and according to the programme laid down the work should have been completed by the end of the Fourth Plan. By the end of the First Plan consolidation scheme was completed in 21 districts covering 34 lakh acres of land. During the period change of possession was completed over 1,89,370 acres of land.

By the end of Second Five Year Plan consolidation work was completed in 60 tehsils covering 35 districts over 6,992,055 acres of land. During Third Five-Year Plan the work was scheduled to be completed over 90

lakh acre land but in comparison to it over 112.70 lakh acre land the change of possession was completed.

The programme for the year (1966-67) was to complete the work of possession over 21,000 acres of land. From April 1, 1967 to the 30th September, 1967 the work of change of possession has been carried over on 3,647 lakh acres of land. In the beginning of the Plan, i.e., upto 30th September, 1967, the possession has been changed in all 155 tehsils of 42 districts on 28,906,463 acres of land of 48,249 villages. From the beginning of the work upto 30th September, 1967, the work of possession was completed in over 22,303,693 acres of land.

In 1969-70 the scheme of survey and demarcation was also started along with consolidation. The target was to complete the work of survey and demarcation in 22,811 villages covering an area of 12,174,967 acres of land by 30th September, 1967. Out of it the actual work has been done in 14,832 villages covering an area of 8,610,494 acres of land along with consolidation.¹ It was expected that by 1973-74 about 115,38 lakh hectares of land will be consolidated. For this purpose an amount of Rs. 2,000 lakh was provided in the Fourth Five Year Plan of Uttar Pradesh.²

1. Vide letter of Mr. R.C.Sharma, Deputy Director, Consolidation of Holdings, U.P. dated 11.12.1971, along with up-to-date Progress Report of 1963-64, addressed to the author.

2. Fourth Five Year Plan, Uttar Pradesh, pp. 378-1

No doubt achievements have been made in many directions to boost the economy of Uttar Pradesh, but the solution of the problems of small farmers lies in the structural changes of our economy. Until and unless immediate steps are not taken to enlarge the area of operation of farm unit the problem which the small farmer faces in increasing agricultural production will not be solved. In short the production per acre will increase when the area of operation of the farm unit will enlarge and farm requirements are met effectively and timely. As credit is the life-blood of agriculture, therefore, it requires our special attention as discussed below:

(c) AGRICULTURAL CREDIT AND FINANCE

"The lesson of history is that an essential of agriculture is credit. Neither the conditions of the country nor the nature of the land tenure, nor the position of agriculture affects the one great fact that the agriculturist must borrow".¹

Every modern business is run on credit. Agriculture in India, however, gives rise to peculiarly urgent problems of finance because of its uncertainty, small unit of farm production and scattered nature of its operations.

The French proverb rightly stresses the urgency of credit to the farmers, "credit supports the farmer as the hangman's rope supports the hanged", The Indian agriculture is dependent upon marginal and subsistence farming by the millions of small farmers who are not in a position

to save for productive purposes due to low output. Hence they depend almost on credit and pay a part of their income by way of interest.

The estimate of the annual magnitude of credit prepared by the Rural Credit Survery under the guidance of the Reserve Bank of India is as follows:

"In relation to the period covered by the Survery and the basis of the date recorded, the total annual borrowings of the cultivators - short, medium and long — may be very broadly estimated for the whole India to be of the order of Rs.750 crores."¹

Finance required for agricultural production can be divided into three categories:

- (i) SHORT TERM (For periods upto 15 months) Usually it is given for one crop season.
- (ii) MEDIUM TERM (For the periods more than 15 months to 5 years). Under the crop loan system in Uttar Pradesh the period is fixed from 18 months to 36 months.
- (iii) LONG TERM (For the periods more than 5 to 15 years).

The short term production requirements of a cultivator may be classified under the following broad

1. All-India Rural Credit Survery Report, Vol. II p.156.

categories.¹

- (a) A basic requirement of cash to meet the labour and other similar charges or to meet the consumption requirements of a cultivator working himself in his own field.
- (b) Inputs in the shape of seeds, fertilizers, insecticides, weedicides etc.
- (c) Additional cash requirements to meet the cost that may be incurred in putting these inputs into use.

The Medium Term Loans are granted for purposes such as sinking of wells, purchase of bullocks, levelling, reclamation or bunding, construction of irrigation channel, purchasing plants and other improved implements etc.

The Long Term Loans are repayable over a large period (i.e., above five years and normally upto fifteen years). These are utilised for payment of old debts, purchase of the heavier machines, making permanent improvement of high costs like construction of tubewells, etc., and increasing the size of the holding.

1. These categories have been enumerated in the "Revised Instructions for fixation of credit limits of and advancements of loans to members of agricultural credit societies for short-term (crop) and medium-term loans in Uttar Pradesh, (Circular No. C-112/58-1(Banking) dated 28 February, 1966, Office of the Registrar Co-operative Societies, Lucknow, U.P.).

Due to lack of statistical data it is difficult to find out the exact amount of loans under cash categories. The Planning Commission has admitted that "A quantitative assessment of the finance required under three categories is extremely difficult as adequate data for the purpose are not available"¹. However, All India Rural Credit Survey Committee² has made a pioneer work of bringing about the following table (No. 13)¹³ which shows the different credit agencies and the percentage proportion of borrowings from each agency to the total borrowings of cultivators.

TABLE 13.

Credit Agency		Proportion of borrowing from each agency to the total borrowings of cultivators.
Government	...	3.3
Cooperatives	...	3.1
Relatives	...	14.2
Landlords	...	1.5
Agriculturist Money lenders	...	24.9
Professional Money lenders	...	44.8
Traders and Commission Agents	...	5.5
Commercial Banks	...	0.9
Others	...	1.8
TOTAL	...	100.0

SOURCE: The Rural Credit Survey Report, Vol.II(Reserve Bank of India), p. 167.

1. First Five-Year Plan, p. 234.
2. The Rural Credit Survey Report, Vol.II(Reserve Bank of India, Bombay), p.167.

The above table reveals that the money-lenders play a dominating role. The professional money-lenders provide per cent and the agriculturist money-lenders nearly 25 per cent of the total loan borrowed by farmers. According to the Report of the Survey agencies other than money-lenders could not be familiar and successful as these money-lenders. The dominance itself has been made possible by the ineffectiveness of all attempts hitherto made to organise a competitive agency for the supply of credit for the rural areas. The money-lenders are dominating the rural credit because "the main fact meanwhile is that the need exist and must seek such fulfilment as they can in the given conditions. These conditions are immediate availability of fund, direct approach to money-lenders, saving of time, etc."¹

The rate of interest generally prevalent throughout India is high because the money-lenders who lend money take a risk which other organised credit agencies do not take and they have, therefore, to protect themselves against loss by charging high rates of interest. The fact is that the rates of interest are of the nature of an insurance against risk.² But we cannot justify the

1. The Rural Credit Survey Report, *op.cit.*, pp.171,173.

2. Report of the Agricultural Finance Sub-Committee 1945, p.59

NOTE: The Government of India appointed in 1944, a
..contd

malpractices of money-lenders. The Agricultural Finance Sub-Committee, thus, sums up its views about the operations of the money-lenders as follows.¹

"While it is true that the money-lender is the most important constituent of the agricultural credit machinery of the country, it is not possible to justify many of his practices and the charges he makes for his services. The credit dispensed by him instead of contributing to the agricultural prosperity of the country, serves as a serious drag on it".

The other credit agencies, such as, Cooperative Societies, Commercial Banks and Government are concentrating their efforts on augmentation of agricultural finance. Ten years after the Rural Credit Survey Report in 1961-62 according to the All-India Rural Debt and Investment Survey of the Reserve Bank of India, the total borrowings of cultivators household from all sources — loans advanced by primary agricultural credit societies and land mortgage banks taken together, and by primary cooperative

Committee known as the 'Policy Committee on Agriculture, Forestry and Fisheries', which set up a Sub-Committee on Agricultural Finance. The Sub-Committee, with Prof. D.R. Gadgil, as Chairman, reported that Cooperatives were not likely to provide an adequate system of institutional credit for agriculture and hence they suggested the establishment of an Agricultural Credit Corporation for each Province except in those where cooperatives were thriving.

1. For details see report of the Agricultural Finance Sub-Committee, 1945.

marketing and processing societies, totalled Rs. 244 crores and 23 crores respectively in 1961-62. Thus the total credit provided by cooperatives comes to Rs. 267 crores, or 25.8 per cent of the total borrowing of cultivator household in 1961-62. In 1964-65 the total credit supplied by the cooperatives were increased to 331 crores.¹ Recently the increase in the volume of credit has been substantial which is indicated through the following table.

TABLE — 14

Primary Agricultural Credit Societies
Operational Details 1972-73

State	(Amount in Lakhs)			
	Loans advan- ced.	Loans outs- tanding	Loans Overdue	Loans overdue as % of loans outstan- ding.
1.	2.	3.	4.	5.
Andhra Pradesh	2817	4283	2235	522
Assam	51	769	659	86
Bihar	1553	2071	1360	66
Gujarat	10044	11336	2787	25
Haryana	2624	2526	1244	48
Himachal Pradesh	479	916	249	27
Jammu & Kashmir*	377B	201	111	55
Karnataka	4556	5837	3001	51
Kerala*	3500B	4309	1284	30
Madhya Pradesh	5580	9720	4510	46

...contd

SOURCE: Cooperative Movement in India - Advanced Statistics 1972-73, Part I, Credit Sector, Administrative Intelligence Division, Department of Cooperation, Ministry of Agriculture, Government of India, p. 21.

1.	2.	3.	4.	5.
Maharashtra	13022	16954	4971	29
Manipur	27	66	54	82
Nagaland @	1	..	1,13	..
Orissa	1390	2776	3593	57
Punjab	6202	6414	3618	56
Rajasthan	1541	2609	1145	44
Tamil Nadu	7102	8030	1929	24
Tripura	76	102	29	28
Uttar Pradesh	6646	9413	4508	48
West Bengal	777	1962	1125	57
<u>U.Ts.</u>				
A & N Islands	4	5	3	60
Chandigarh	1	4	1	25
Dadra Nagar Haveli	1	-	-	..
Delhi*	57B	113	21	19
Goa, Daman & Diu	48	52	22	42
Laksh Dweep	4	4	-	-
Mizoram*	1	..	-	-
Pondicherry	66	76	16	21
All India 72-73	68556	90548	36443	40
All India 71-72	61453	85826	37666	44
Eastern States 72-73	3876	7746	4810	62
Eastern States 71-72	3109	7327	4876	67
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* Data relate to 1971-72

B Estimated figures

- Nil or Negligible

@ Data relate to 1970-71

..Not available

SOURCE: Cooperative Movement in India-Advance Statistics
1972-73 Part I, Credit Sector, Administrative
Intelligence Division (Department of Cooperation,
Ministry of Agriculture, Government of India)

The above table indicates that these societies have advanced Rs. 6,646 lakhs of rupees in U.P., as short and medium term loan during 1972-73. The loan outstanding during 1972-73 amounted to Rs. 9,413 lakhs and while over dues were to the tune of Rs. 4,508 lakh. The increase in over dues position is retarding the progress of cooperatives. In spite of poor performance of credit sector the Government is keen to provide to more and more financial help to the farmers through cooperatives.

It has been estimated that the total short-term and medium-term credit in the last year of the Fourth Plan would be about Rs. 650 crores. In addition, the Reserve Bank will have to meet the credit needs of members of cooperative societies for the high yielding varieties programme. In 1965-66, primary cooperative societies were estimated to provide Rs. 400.00 crores for short and medium-term credit for which cooperative banks are assisted by the Reserve Bank of India has sharply increased in recent years. In 1951-52, the short-term credit limits sanctioned by the Reserve Bank at a concessional rate of interest which is now 2 per cent were Rs. 12.40 crores. This increase is indicated in the following table.¹

1. Prepared from Statement 12, Reserve Bank of India Bulletin, Reserve Bank of India, Bombay, June, 1967.

TABLE 15

Year	Advance	Outstanding
1951-52	12.40	6.45
1960-61	147.11	89.41
1961-62	192.92	122.80
1962-63	220.28	134.22
1963-64	301.56	135.59
1964-65	283.49	148.63
1965-66	293.44	161.72
1966-67	330.94	170.68

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SOURCE: Reserve Bank of India Bulletin, Statement 12,
R.B.I., Bombay June, 1967.

The Fourth Plan provides an outlay of Rs. 206 crores as compared with an estimated expenditure of Rs. 76.76 crores in the Third Plan. The short-and medium-term credit provided by primary agricultural societies has been estimated at about 331 crores in 1964 and Rs. 400 crores in 1965-66. For short-term credit and also for medium-term credit, cooperative banks are assisted by the Reserve Bank. The volume of short term credit made available by the Reserve Bank of India to cooperative banks has increased sharply in recent years. As regards Cooperative Long-Term Credit, it is expected that the

outstandings of such loans at the end of 1965-66, will be Rs. 150 crores thus fulfilling the Third Plan target. The tentative estimates of the fresh loans to be advanced by Cooperative Land Mortgage Banks* during the Fourth Plan is Rs. 300 crores. For fulfilling this programme it has been estimated that the land mortgage banks will have to float debentures for about 275 crores. The target for long-term credit in the Fourth Plan cannot be reached without fuller support from the Reserve Bank, State Bank, Life Insurance Corporation, Government and the cooperative credit structure itself.¹

During the year 1967-68 the short and medium-term agricultural credit amounting to rupees 520 crores is expected to be disbursed through cooperatives. This will be in addition to a long-term programme of Rs. 65 to 70 crores to be carried through land mortgage banks during the year.

During the year 1966-67 emphasis has been placed on advancing loans for minor irrigation, land-scaping, land reclamation and purchase of agricultural machinery.

At the beginning of the Third Plan, the total short and medium term credit disbursed was Rs. 203 crores. This

*. In Uttar Pradesh it is known as Land Development Bank.
1. Fourth Five-Year Plan (Draft Outline), p. 138.

increased to about Rs. 345 crores in the last year of the Third Plan ending June 1966.

During this period the membership of the societies increased from 170 lakh to 210 lakh and the coverage of rural population increased from 25 to 33 per cent.¹

There were 1,57,454 primary agricultural credit societies, 341 central cooperative banks and 26 state cooperative banks in the country^{which} constituted the structure for providing short and medium term agricultural credit at the end of the cooperative year 1971-72. About 95 per cent of the villages and 38 per cent of country's rural population has been covered by these societies. During this year the primary societies advanced loans amounting to Rs. 614.53 crores which was 37 crores more than the year 1970-71. The average loan per member during the year 1971-72 amounted to Rs. 192 as against Rs. 187 during 1970-71. About 36 per cent of the total members of these societies have taken advantage of credit facilities. The loans over dues have also been highest during this year i.e. 44 per cent. There is an increase in the membership of the societies. In 1971-72 these societies had 320 lakh members.²⁼

1. Annual Report, Department of Cooperation, Government of India, The Hindustan Times, 12 September 1967.

2= Cooperative Credit Societies in India, Statistical Review of Progress 1971-72, Department of Cooperation Ministry of Agriculture, Government of India, pp. 2-3,

Apart from assistance from the Reserve Bank, the cooperative banks with their growing strength, should be able to avail themselves of larger financial accommodation especially for marketing and processing, from the State Bank of India. Besides, cooperative banks can also turn to the Agricultural Refinance Corporation which was set up in July 1963 to augment the resources available for the provision of medium and long-term finance for agriculture. This is in addition to the traditional system of Government loan for agriculture or taccavi. Even though the object of governmental policy is to discontinue taccavi for agricultural production direct to individuals and to disburse such loans through cooperatives, in areas where the cooperatives are very weak, taccavi may have remained as a transitional measure.¹

1. Fourth Five-Year Plan(Draft Outline), p. 139.

These measures will no doubt relieve the agriculture of its burden partially but they cannot meet the entire credit requirements of the agriculturists in the Fourth Plan. This is partly because of the weaknesses of the structure in some areas and partly because of the fact that there are classes of cultivators who do not join cooperative societies. In this context, reference may be made to the proposal made by an Informal Group set up by the Reserve Bank of India in May 1964 to provide a supplementary source of credit in areas where the cooperative credit structure is very weak by setting up agricultural credit corporations which would disappear from the field as and when the cooperative credit structure is developed which has been implemented in various states. In areas where the cooperative movement is weak taccavi must continue as an interim measure without damaging the prospects for development of cooperatives. Besides, as agriculture becomes productive the more affluent classes of cultivators would be able to seek accommodation from commercial banks.¹ At the moment lack of adequate finances are affecting the growth of agriculture.

1. Fourth Five-Year Plan(Draft Outline),pp. 134, 140.

Note:-The Commercial banks are taking part in agricultural finance after nationalization of banks, Although the progress is slow but it is hoped that in due of time they will gain experience and over come the problems faced by them at present.The Commercial Banks have advanced Rs. 41 crores as on June 1969 (see Draft Fifth Plan, Planning Commission, New Delhi, p.5).

"Lack of adequate and timely finance at reasonable rates has been one of the main handicaps to the cultivators in making land improvements, adopting better cultural practices and buying the necessary inputs. This is an all-India problem but owing to the greater backwardness of agriculture in Uttar Pradesh, it is relatively a more serious problem here. Even to this date the bulk of the credit requirements are met by the traditional sources at high rates of interest, Even assuming a moderate figure of Rs. 50.00 per acre* for short and medium term purposes in the State, the total annual loan requirement comes to Rs. 268 crores at present and is expected to be of the order of Rs. 426 crores by 1975-76"² As against this, the cooperative credit supply in 1960-61 was only Rs. 30 crores. It has increased to Rs. 44.48 crores during the year 1965-66 over and above 11.89 crores which has been advanced by the Land Development Bank during the same period.³ It has been estimated that by 1975-76 the total annual requirements will be Rs. 426 crores by assuming a moderate figure of Rs. 50 per acre,⁴ but the position regarding cooperative credit is as follows:

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- *. On an average Rs. 60 per acre should be sufficient for credit requirements.
 - 2. Techno-Economic Survey of U.P., NCAER, New Delhi, p.41.
 - 3. Cooperation in U.P., (Hindi), 1967, Department of Cooperation, Uttar Pradesh, p.3.
 - 4. Techno-Economic Survey of Uttar Pradesh op., cit. p.41.

TABLE - 16

I t e m	Unit	Estimated level of achievement							
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	
(1) Primary Cooperative Societies(Agricultural Credit)									
Number	No	28,890	25,493	1,500	1,500	1,500	1,500	1,500	
Membership	Lakh No.	56.99	56.00	61	64.50	63.00	71.50	75.00	
Share Capital of Members	Rs.Crores	0.98	1.23	2.23	3.73	5.23	6.73	8.23	
Deposits of members	-do-	1.26	2.46	2.96	3.46	3.96	4.46	4.96	
(11) Agricultural Credit:									
(a) Short term advances during the year	-do-	40.16	45.00	50.00	57.50	65.00	72.50	80.00	
Amount outstanding at the end of the year	-do-	63.08				No targets fixed.			
(b) Medium term advances during the year	-do-	3.71	6.00	6.00	6.00	6.00	6.00	6.00	
Amount outstanding at the end of the year	-do-			No target fixed					
(c) Long term advances during the year	-do-	10.77	27.00	27.00	27.00	28.00	29.00	29.00	
Amount outstanding at the end of the year.	-do-	23.12	45.96			No targets fixed.			

NOTE : - Fourth Five Year Plan, Planning Department, Government of Uttar Pradesh, PP. 380-381 August, 1969.

The table reveals that the amount allotted under IV Plan was not sufficient for healthy development of agricultural sector. If cooperatives have lagged behind in providing sufficient credit the State will not break the shell of poverty.

OTHER FARM PRE-REQUISITES

(1) CHEMICAL FERTILIZERS AND MANURES

The use of chemical fertilizer for the production of foodgrains was unknown in India prior to World War II. Its use was confined mainly to the plantation and cash crops. When the Government launched the "Grow More Food Campaign"^{*} in 1943-44 the use of chemical fertiliser was introduced for increasing the production of foodgrains. But little has been done to increase agricultural production through the use of fertilizers and manures. The present level of fertilizer consumption per hectare in India is lowest in the world. The likely consumption at the end of the Third Plan was estimated to be of the order of 0.60 million tonnes of nitrogen, 0.15 million tonnes of P_2O_5 and 0.09 million tonnes of K_2O . For the

*. In order to meet the shortage of foodgrains the "Grow More Food Campaign" was started in 1943 which adopted "Intensive cultivation of cultivated lands through irrigation better seeds and manures and better farming practices as the guiding principle for stepping up agricultural production."

Fourth Plan, targets of 20 million tonnes of nitrogen, 1.0 million tonnes of P_2O_5 and 0.35 million tonnes of K_2O was proposed in the expectation that the intensive programme for high yielding varieties will require a large supply of fertilizers. As sufficient quality of fertilizer was not available within the country, therefore, imports of fertilizer were emphasised. The budget proposals provide for the import of about 774,000 tonnes of nitrogen. The programme of imports during 1967-68 includes the procurements of diammonium phosphate, ammonium phosphate and complete NPK, which are concentrated fertilizers, besides the import of ammonium sulphate,

urea and calcium ammonium nitrate.

An outlay of Rs. 10 crores was proposed for five years in the hope that at least 10 states would set up agro-industries corporations during the Fourth Plan. The centre has asked the States to set up such corporations which could play a significant role in the development of agro-industries and in encouraging consumption of their products.¹ In 1970-71 the rate of growth of consumption of nitrogenous phosphatic and plastic fertilizers was only 6.2 per cent compared with 13 per cent in 1969-70 and 14.3 per cent in 1968-69. The rate of growth is also considerably lower than the 14.5 per cent envisaged during the Fourth Plan. However in 1972-73 an upward trend in the consumption of fertilizer was maintained. The consumption of fertilizers went up to 27.55 lakh tonnes of nutrients (nitrogen, phosphates and potash) as against 26.56 lakh tonnes in 1971-72. The consumption of nitrogenous fertilizers was 18.29 lakh tonnes, of phosphatic fertilizers 5.92 lakh tonnes and of potassic fertilizers 3.34 lakh tonnes as against 17.98 5.58 and 3.00 lakh tonnes respectively during 1971-72.

1. The Hindustan Times, New Delhi, May 27, 1967.

Note: As a result of it the state Governments have developed agro-industries in their respective states. These cooperatives are playing a significant role.

To encourage the balanced use of fertilizers, a Fertilizer Promotion Scheme involving an outlay of Rs. 2.19 crores was approved in 1972-73 and put into operation in 26 selected districts in 17 states.

The flow of credit to fertilizer distributing agencies and to farmers was accelerated during 1972-73. The Central Government sanctioned short-term loans amounting to Rs. 99.92 crores for all inputs, including fertilizers, an increase of Rs. 40 crores over the preceding year. The State Bank of India and nationalised banks also provided credit for direct and indirect financing of distribution and use of fertilizers.¹

It is expected that a capacity of 4.1 million tonnes of nitrogen and 1.2 million tonnes of P_2O_5 will be achieved in the early years of Fifth Five Year Plan.²

MANURES:

It is necessary to increase the use of green manure and other local manural resources like cattle dung, farm-waste and night soil. At present the cattle dung is used in the villages and towns in place of fire-wood.

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1. India 1974, Publication Division, Ministry of Information and Broad Casting, Government of India, pp. 178-179.
 2. Directory & Year Book 1974/75, The Times of India Press, Bombay.

Efforts should be made to educate the rural folk regarding the utility of cattle dung as a manure.

It was felt that 64 million acres should be brought under green manuring by the end of the Fourth Plan. Moreover, it is proposed to instal about 5,000 family-size gas plants on the fields of progressive farmers around 50 workshops in the course of the next five years.¹ For the development and utilisation of local manurial resources, three schemes are in operation as State Plan schemes. These are (i) rural compost scheme, (ii) green manuring, and (iii) urban compost and sewage utilisation scheme.

Rural compost production during 1971-72 was 15.88 crore tonnes. The coverage under green manuring during 1971-72 was 0.85 crore hectares. Under the urban compost scheme, 46 lakh tonnes of compost were made available during 1972-73 as against 44 lakh tonnes in 1971-72.²

1. The Hindustan Times, New Delhi, May 27, 1967.

2. India 1974, Publications Division, Ministry of Information and Broad Casting, Government of India, p. 179.

UTTAR PRADESH

In order to achieve the target fixed for this State for the First Five-Year Plan only it was necessary to harness all the manurial resources in the State. Although in the First Five-Year Plan only three schemes, viz., Utilisation of Slaughter House Waste, Town composting scheme and Rural Composting Scheme were included, yet 2.25 lakh tonnes of various types of fertilizers were distributed during this period. In order to explore the possibility of preparing blood-meal from the slaughter houses maintained by the local bodies in the State which was hitherto wasted and to use it for manurial purposes, a scientific method was evolved for processing blood into valuable manure containing 13 per cent nitrogen. The above method was adopted by five local bodies which produced 18.28 tonnes of blood-meal during 1951-56 of which 3.7 tonnes were produced during 1955-56.

Efforts were made to increase the production of fertilizer and manure during the Second Five-Year Plan and Third Plan. During the year 1961-62, 1.55 lakh tonnes of nitrogenous fertilizers in terms of ammonium sulphate and 0.25 lakh tonnes of phosphate fertilizers in terms of ammonium sulphate were distributed. During 1962-63 the respective figures for nitrogenous and phosphatic ferti-

lizers were 2.06 and 0.33 lakh tonnes against the target of 4.00. ^{lakh tonnes.} The distribution of fertilizers reached a level of 3.25 lakh tonnes of nitrogenous fertilizers in terms of ammonium sulphate and 0.51 lakh tonnes of phosphatic fertilizers in the year 1963-64. The requirements of Fertilizers & manures for the Fourth Five Year Plan period were estimated at 11.01 lakh tonnes of N, 6.76 lakh tonnes of $P_2 O_5$, and 6.10 lakh tonnes of $K_2 O$. As all the farmers don't use fertilizer, therefore, 66% of the calculated quantities were like as the real consumption. In this way the requirement for the fourth plan was assessed at 7.50 lakh tonnes of N, 3.90 lakh tonnes of $P_2 O_5$ and 2.70 lakh tonnes of $K_2 O$. During fourth plan the total expenditure for manures & fertilizers was estimated at Rs. 261.44 lakh. It was proposed to bring 12.14 lakh hectares under green manuring by the end of 1973-74.¹ So far, it has not been possible to make green manuring seeds available to the cultivators in adequate quantity. Special measures, however, have been taken to encourage the farmers to raise green manure seeds in bulk.

In view of the shortage of foodgrains and raw material for industrial use, it is imperative to increase the production for which an increasing use of fertilizers and manure is necessary. The high cost, lack of knowledge regarding its use and utility, and inadequate irrigation facilities are the facts mainly responsible for a comparatively low use of fertilizer in India.²

1. For details see Fourth Five Year Plan, Uttar Pradesh, pp. 78, 79, 360 & 361. (The Assembly)

(ii) IRRIGATION: Without an adequate and regular supply of water, agriculture must remain precarious. Where rainfall is seasonal and inadequate, artificial irrigation is indispensable for increasing agricultural production. The average rainfall in India as a whole is 45 inches per annum, but local variations are considerable. For instance, in western Rajasthan, it is only 10 inches in the year, while in the sub-mountain tracts of Uttar Pradesh it goes up to 100 inches. Besides, rainfall is unequally distributed through the seasons.¹ Most of the rain (except in Madras) falls between June and October. The rest of the year is very dry. Thirdly rainfall is sometimes deficient and is liable to failure. Thus for an assured supply of water it is necessary to develop irrigation system in India.

India's water resources have been provisionally estimated at 13,560 lakh acre-feet of which about 4,500 lakh acre-feet are utilisable for irrigation. But 880 lakh acre-feet representing only 6.5 of the total and about 19.5 per cent of the utilisable water were actually utilised upto 1951.² By the end of the Second Plan 120 million acres (i.e., 27 per cent of the usable flow or 8.9 per cent of the total annual flow) was utilised.

*. Dewett, K.K., Indian Economics, 1966 edition, Premier Publishing Company, New Delhi, p. 132.

In short the Five-Year Plans have assigned a great importance to irrigation. The outlay in the First and Second Plans and the likely expenditure in the Third ^{and Fourth} Plans on major and minor irrigation schemes are shown in the following table.

TABLE — 17

First Plan	300 crores	
Second Plan	380 crores	
Third Plan	600 crores	(Provisional. The likely expenditure is Rs. 572 crores).
Fourth Plan	849 crores	(It includes Rs. 24 crores for Tenughat Dam which is being constructed primarily for supply of water to the Bokaro Steel Plant).

SOURCE: Fourth Five Year Plan(Draft Outline), p.219.

Eighty per cent Indians live on agriculture, but produce only 45 per cent of GNP. Estimated harvest in India is about 100 million tonnes. However, to reach self-sufficiency we need about 120 m.tonnes. Against 194.24 m. hectares cultivable area in the country, gross cultivated area is 157 m.hectares. But irrigation is available for only 36.42 m. hectares. The rest (77 per cent) is still at the mercy of the monsoons. Out of the irrigated area only two third has assured irrigation, one third is irrigated by small tanks and wells which are undependable in dry years. However, irrigation potential of the country is estimated to be enough for 81 m. hectares of which only

60-70 million hectares can be assured of water supply.¹ In 1973 as many as 14 states experienced severe drought conditions including Uttar Pradesh and has affected more than 200 million people in the country. If cooperative farming is developed, not only the cultivable area can be utilised but the irrigation potential were also develops as the cooperative farms enjoy a better position in securing loan & utilising the resources.

To increase the irrigation potential in India it is necessary to provide incentives and means for the farmers to take up the work of constructing tube-wells and electric water pumps on their farms.

UTTAR PRADESH

More emphasis has been laid down on increasing the irrigated area in Uttar Pradesh. As a result of it a significant improvement has been made in this regard as is evident from the following table:

TABLE — 18

Expenditure on Irrigation and Power in U.P.

I Plan	5622 Lakh
II Plan	8218 Lakh
III Plan	21862 Lakh

..contd

1966-69	22736 lakh actual
1969-70	9728 lakh likely
1970-71	9930 lakh estimated
1971-72	11205 lakh outlay

IV Plan 90 crores

The actual expenditure is anticipated at 159.40 crores.¹

In view of the importance of agriculture in Uttar Pradesh it is necessary to provide more irrigation facilities. The Cooperative Land Development Banks, Commercial Banks and state level organisations like Agro-Industries Corporations should be encouraged to help the farmers in improving upon the existing facilities.²

The Planning Commission while considering the State's Fifth Plan document recommended an outlay of Rs. 267.30 crores which was subsequently raised to 294.71 crores. It seems imperative that the minimum outlay for this sector should be Rs. 394.91 crores. With this investment it would be possible to add irrigation potential of 22.66 lakhs hectares in the Fifth Plan.

Against the Fourth Plan outlay of Rs. 90 crores the actual expenditure is anticipated at Rs. 159.49 crores. This includes an expenditure of Rs. 48.89 crores anticipated of during 1973-74. Keeping in view the pace of acceleration during 1973-74 and the outlay envisaged in the State's Fifth Plan the State has decided to provide Rs. 58.00 crores for the Irrigation Schemes during 1974-75. This constitutes 14.7 per cent of the Fifth Plan outlay.

The Fifth Plan gives priority to completion of continuing schemes of the Fourth Plan and those new schemes which can yield substantial or partial benefits during the Fifth Plan itself. An outlay of Rs. 129.18 crores has, therefore, been provided for the works which have spilled over from the Fourth Plan, out of which Rs. 35.07 crores are proposed to be spent during 1974-75.

1. Fifth Five Year Plan, U.P. Annual Plan 1974-75, p.151.

2. Ibid.

(iii) IMPROVED SEEDS & HIGH YIELDING VARIETIES PROGRAMMES:

One of the outstanding achievements of modern agricultural science is the production of a number of improved varieties of seeds for different crops. What we need today is to educate the farmers regarding the importance of improved varieties of seeds and to supply them in time in accordance with their requirements. If the improved varieties of seeds are used, there will undoubtedly be an increase in per acre production. The Famine Commission has estimated in 1945 that an increase in production from 5 to 10 per cent can be obtained from improved seeds.¹ The Intensive Agricultural District Programme has proved the importance of improved variety of seed.² In the I.A.D.P. districts one of the factors which has contributed towards high yield per acre is the use of improved variety of seed. Under the Fourth Plan, the principal programme for achieving increased foodgrains production was to raise the coverage under the high yielding varieties (HYV) of cereals from the base level of 92 lakh hectares in 1968-69 to 250 lakh hectares in 1973-74. The area covered under the programme increased to 225 lakh hectares in 1972-73.

1. Famine Commission Report, p. 151.

2. For details see: Intensive Agricultural District Programme Report 1961-63 Expert Commission on Assessment and Evaluation, Ministry of Food & Agriculture, Department of Agriculture, New Delhi.

The effect of the HYV programme on wheat production has been revolutionary. Before the introduction of high yielding varieties, the highest level of wheat production (123 lakh tonnes) was reached in 1964-65. It almost doubled in 1970-71 and rose to 265 lakh tonnes in 1971-72. The cultivation of high yielding varieties of wheat has now been extended to even non-traditional areas such as Assam, east Bihar and West Bengal.

In respect of rice also, research efforts have been intensified to evolve varieties which are finer in quality, high-yielders and resistant to pests and diseases.¹

(iv) AGRICULTURAL IMPLEMENTS AND MACHINERY

Since long the Indian farmers are using indigenous and traditional implements which are well adapted to the local conditions and the capacity of the draught cattle. They are light, portable, inexpensive, easily made, repaired and constructed of material readily available. Agricultural implements may be classified as implements for:

- (a) Preparing the seed bed,
- (b) Cultivating operations,
- (c) Harvesting and threshing works,
- (d) Processing and Utilisation of agricultural produce,
- (e) Lifting water.

During the period of First, Second and Third Five-Year Plans attention has been given to the problem of evolving more efficient agricultural implements such as iron ploughs, seed drills, soil scoopers, clod crushers, ridgets, harrows, etc. Attempts have also been made to evolve suitable threshers, winnowers and small tractors.

¹. India 1974, Publications Division, Ministry of Information and Broadcasting, Government of India, p. 179.

The most popular of the improved implements are the light iron plough, cheffcutter, crushing mills and iron persian wheels.

Whether agriculture should be mechanical or not, is a vital question indeed. There is no consensus of opinion on this issue among economists and politicians in the country. There are some who regard mechanisation of Indian agriculture as highly necessary and desirable. But, on the other hand, there are others who agree that in a country like India where agricultural labour is cheap and abundant and where there is also unemployment and under-employment, mechanisation is not feasible. The arguments that holdings are small, local repairs of machinery is difficult, etc., are cited as reasons for not adopting mechanisation.

The question of mechanisation may be looked at from two view points. The first is that of its immediate applicability. The second one relates to the place that mechanisation should be given in the future agricultural economy of the country. As regards its immediate applicability we can say that at present holdings on an average are small but it does not mean that there are no big holdings. Some of our holdings are big enough to be mechanised and in fact on many of them modern machi-

nes are being used with advantage. Moreover, mechanisation does not mean use of big tractors and heavy machinery. Small tractors and other machines suitable for work on small holdings of 20 to 50 acres are also available. As regards the fear of unemployment due to mechanisation, it may be pointed out that the magnitude of unemployment that will be caused is grossly exaggerated and the capacity of the economic system to absorb the displaced persons is greatly under estimated. Mechanisation of agriculture will help in lifting the economy of the country to a higher level. As a consequence secondary and tertiary occupations will multiply at an increasing rate offering adequate employment to the sur-plus workers. With the growth of agro-industries the position will still be better.

There is a fear that a large cattle population will be rendered surplus with the adoption of mechanised farming. The large cattle population makes large demand on the must-too-abundant agricultural output of the country. In fact, in many parts of the country there is already a serious competition between man and cattle for subsistence from land.¹ Thus there is a great need for reduc-

1. Dewett and Singh, op. cit., p. 116.

tion in the number of bullocks. The poorly fed cattle can profitably be used in earning exchange necessary for the economic development of the country.

Moreover, we are engaged today in the reclamation of land for which heavy machinery is needed. The use of machinery is also unavoidable in case of irrigation, transport, etc.

The use of machinery has demonstrated good results in western countries as well as in India. The mechanised farm at Saratgarh and the Phetia Cooperative Society¹ (U.P) have demonstrated beyond doubt that productivity, per acre greatly increases with the introduction of mechanised farming.

I am, therefore, convinced that agriculture should be mechanised slowly and gradually. The policy should be followed cautiously to avoid over dosing of mechanisation.

The programme for improved agricultural implements has seriously lagged behind in the first three plans. It is largely due to shortage of iron and steel, lack of suitable design of implements, high cost of manufacture,

1. For details see: Report of the Working Group on Co-operative Farming, Vol. II, Government of India, 1959.

lack of adequate and timely credit at reasonable rates to farmers for purchase of implements, lack of repair and maintenance facilities, difficulty in obtaining spare parts and lack of competent extension machinery to demonstrate the effectiveness of improved implements.

A Board of Agricultural Machinery and Implements was formed to review and expedite the work of manufacturing and popularisation of improved agricultural implements. Further, the Committee on Plan Projects also set up an Agricultural Team in 1962 to undertake the study of improved agricultural implements and machinery in India. This team has completed studies in eight States - Punjab, Madras, Mysore, Maharashtra, Bihar, Himachal Pradesh, Assam and Uttar Pradesh. It has observed that the existing arrangements for research, manufacture, distribution, extension and training in respect of agricultural implements are far from satisfactory. It has recommended that the programme for research, extension training pertaining to agricultural implements has to be organised, keeping in view the urgency of the problem and the requirements of the States. The team has also made recommendations in regard to administrative set up and coordination, selection of implements, supply of raw materials, training, extension and popularisation. All these points have been taken into

consideration while formulating the Fourth Plan proposals.¹

The establishment of Agro-Industries Corporations in different states with the object of enabling persons engaged in agricultural and allied pursuits to own the means of modernising their operations and distribution of agricultural machinery and implements as well as equipment pertaining to processing, dairy, poultry, fishery and other industries connected with agriculture. The Corporations had distributed 34,053 tractors, 51,664 pump-sets and 1,421 power tillers up to the end of December 1972.

Of late, some of the Agro-Industries Corporations have taken up distribution of other inputs like fertilizers, pesticides and seeds to farmers in certain areas. Besides, some Corporations have also undertaken other activities like land reclamation, establishment of fruit and vegetable processing factories, cattle and poultry feed plants, fertilizer granulation factories, rice bran oil extraction plants.

A scheme for the establishment of agro-service centre is being implemented to promote entrepreneurship among technical personnel by providing them with suitable facilities.

1. Fourth Five Year Plan (Draft Outline), pp.191-192

ble training and financial assistance. The prospective entrepreneurs are trained in 16 training centres and are helped to set up Agro-Service Centres by finances provided by the nationalised banks. Ninetyfive such centres were established between 1970 and 1972 and 360 centres during 1972-73. So far 812 entrepreneurs have been trained and another 325 entrepreneurs are under training.

To provide facilities for hiring and servicing agricultural machinery, specially for the benefit of small and marginal farmers, the State Agro-Industries Corporations have set up 126 customs hiring centres in the country.¹

It was estimated that the demand for wheeled type of tractors will be 40,000 by 1970-71. By the end of the Fourth Plan about 30,000 tractors will be produced in the country. Moreover, the existing capacity will be increased to meet the demand of both electric motor driven as well as diesel driven pumping sets. One unit in the public sector and two units in the private sector, with a total capacity of over 1,100 crawler tractor in different horse-power range have been licenced. However, it is envisaged that by the end of the Fourth Plan

1. India 1974, Publications Division, Ministry of Informations & Broadcasting, Government of India, pp. 180-181.

or early Fifth Plan, the demand would be largely met from indigenous sources.¹

The following table shows the various items of agricultural machinery in the country according to the quin-quennial censuses of 1956, 1961 and 1966.

TABLE — 19

AGRICULTURAL MACHINERY

Description	1956 census	1961 census	1966 census
1. Ploughs			
(a) Wooden	36,142	38,372	39,880
(b) Iron	1,376	2,298	3,521
2. Carts	10,968	12,072	12,695
3. Sugarcane crushers			
(a) Worked by power	23	33	45
(b) Worked by bullocks	545	590	650
4. Oil engines (with pumps for irrigation purposes)	123	230	471
5. Electric pumps (for irrigation purposes)	47	160	415
6. Tractors(used for agricultural purposes only)	21	31	54
7. Ghanis			
(a) Five kg and more	26	78	74
(b) Less than five kg	212	172	159

SOURCE: India 1974, Publications Division Ministry of Information and Broadcasting, Government of India, p. 176.

1. Fourth Five Year Plan (Draft Outline), p. 269

The Agro Industries Corporation has undertaken the programme for import of and assembling and distribution of tractors and manufacture of power driven implements, opening of service centres, fertilizer distribution, etc. During the Fourth Five Year Plan its business has expanded from Rs. 1.28 crores in 1968-69 to Rs. 25.00 crores in 1972-73. Its annual profits are also increasing as would be seen from the following table:

TABLE — 20

Year	Volume of business	Profit
1968-69	128.42	10.26
1969-70	532.33	34.65
1970-71	916.94	36.37
1971-72	1690.00	46.00
1972-73	2500.00	55.00

By the end of 1973-74 the Agro Industries Corporation is expected to have distributed 8,000 tractors, 1368 pump sets, 17 power tillers and 9,865 agricultural implements. The targets for Fifth Five Year Plan and Annual Plan 1974-75 are as follows:

TABLE — 21

Item	Unit	Target for	
		Fifth Plan	1974-75
1. Distribution of Tractors	Nos.	10,000	2,000
2. Distribution Pump-sets	Do.	15,000	3,000
3. Distribution of Power Tillers	Do.	44	10
4. Distribution of Agricultural implements	Do.	15,000	3,000

An outlay of Rs. 75 lakhs has been proposed for 1974-75 for share participation by the State Government.¹

1. Fifth Five Year Plan Uttar Pradesh, Annual Plan 1974-75 Planning Department Uttar Pradesh, p.18.

(v) INSECTICIDES, PESTICIDES AND WEEDICIDES:

Indian farmer has been ignorant of measures for the control of pests and diseases in agricultural crop and plants. In India use of insecticides, pesticides and weedicides is of recent introduction in the field of farming. It was only at the beginning of the present century that serious attempts to study disease and pests were made in this country and the knowledge gained was penetrated down to the cultivators. But due to lack of proper knowledge and poverty the farmers could not gain much from these insecticides, pesticides and weedicides etc. The result was a colossal loss to the crops. According to the Famine Commission:

"The normal recurring loss to the crops in India from disease, pests, vermin, etc., may on a conservative basis, be placed at 10 per cent of the total produce" ¹

The international conference organised by the Food and Agricultural Organisation in London in 1947 has also estimated a loss at the rate of about 10 per cent by these pests and diseases etc. ²

In view of the above, the programme of plant protection has been undertaken since the beginning of the First Plan. The plant protection programme consists of seed treatment, control of field rats, control of soil and polyphagous insects and disease control measures on annual and perennial crops. A target of 137 million acres to be covered by the third year of the Fourth Plan was proposed for the plant protection. This includes an area of 50 million acres under seed treatment, 20 million acres under rat control, 20 million acres under

1. Famine Commission Report, p. 158

2. First Five-Year Plan, p. 263.

polyphagous and soil insects treatment, 40 million acres under intensive treatment and 7 million acres under weed control. These acres might be overlapping to a certain extent.¹ Based on the plant protection programme the demand for pesticides in terms of 'technical materials' is expected to be of the order of 1,00,000 tonnes by 1970-71. The Fourth Five-Year Plan programme envisaged a substantial increase in the range and output of pesticides. It was proposed to increase the capacity from about 18,000 tonnes in 1965-66 to 1,00,000 tonnes by 1970-71. Apart from substantial expansion in capacity in items like BHC and DDT already produced in the country, major increases are envisaged in organic phosphates, endrin and carbaryl. In addition to the expansion of the existing public sector projects under Hindustan Insecticides, additional production of DDT and BHC is envisaged in the Gujarat Petrochemical complex and the Hindustan Organic Chemicals. In several other items capacity has been licensed more or less to the full extent in the private sector. The production programme is being carefully watched so that gaps, if any, can be filled with additional capacity in the public sector.²

1. Fourth Five-Year Plan (Draft Outline), p. 191.

2. Second Five-Year Plan, p. 277.

The total area benefited by plant protection measures is estimated at about 521 lakh hectares in 1972-73.

In spite of publicity of plant protection measures the small farmer could not make use of it because of high price of insecticides etc. During sudden epidemics, a small farmer has to pay very high price for them. He cannot arrange for necessary spraying pumps etc. The result is low production and consequently increasing indebtedness. No doubt, if the farmers join together, they may add to their prosperity without any additional cost on such items. In U.P. good work has been done in the direction of plant protection. The measures will be further expanded and strengthened. It has been decided to take up intensive cane protection operations on the basis of package programmes earlier started. During 1974-75, 1,740 dusters and an equal number of sprayers would be given to the cane growers' at 25 per cent of the cost. The important programmes that are included in the annual plan of U.P.(1974-75) are as follows:¹

1. Intensification of fertilizer programme under which five big and six small manure godowns will be constructed during 1974-75. The State will subsidise the construction of these godowns to the extent of 25 per cent.
2. The State has decided to start 30 cooperative sugar factories and four sugar factories in the public sector during the Fifth Plan. It is necessary to ensure that these sugar factories get full feed from the very beginning. It is, therefore, proposed to initiate necessary programme for intensive cane development in the areas of these prospective factories.
3. The research in sugarcane has not been able to keep pace with the requirements of the field so far. It is, therefore, proposed to intensify studies on varietal, cultural and biological aspects of cane development.

4. Provision of assured irrigation forms an important part of the cane development programme. During 1974-75, an additional irrigation potential of 1.18 lakh hectares would be created in the sugarcane factory areas.

5. The emphasis on balanced supply of fertilizers will continue during 1974-75 and it is proposed to supply 0.69 lakh tonnes of N, 0.11 lakh tonnes of P_2O_2 and 0.06 lakh tonnes of K.*

SUMMARY:

The study reveals that during the period of planned development of our economy efforts are being made for developing the economy of India and all other states including Uttar Pradesh to create conditions of self sustained growth. But considered from the point of view of increase in agricultural production & per capita income the progress achieved so far is not encouraging. The food production targets have not been achieved either due to unfavourable weather conditions in different parts of the country or other unforeseen reasons. The food situation in the country was rather different in 1972 as a result of the set back in food grains production of over 30 lakh tonnes in 1971-72 and damage

*. Fifth Five Year Plan Uttar Pradesh, Annual Plan 1974-75, Planning Department, Uttar Pradesh, p. 21.

of Kharif crop due to scanty rainfall & draught conditions in different parts of the country. Consequently arrangements were made to import 20 lakh tonnes of foodgrains on commercial terms to replenish the buffer stocks and to ensure uninterrupted flow of supplies through the public distribution system. It is expected that with a little effort and better planning it will be possible to grow 120 million tonnes of foodgrains, the amount needed to feed the increasing population in 1975-76.¹

The government has taken a number of measures to increase food grain productions like reclamation of land, popularisation of High Yielding varieties, establishment of Research Centres, Land Use Survey Organisations and plant protection measures. Moreover measures like ceiling of holdings, development of fertilizer industry, development of seed development corporations, establishment of central state farms, have also been taken to help the situation. The cooperative movement has been strengthened to meet out the credit requirements of the farmers. The Fourth Five Year Plan of Uttar Pradesh has provided sufficient funds for the development of agriculture & allied programmes like, improved seed

1. See Annual Report of the National Council of Applied Economic Research 1974-75 (quoted from Hindustan Times, New Delhi February 12, 1975, p.1.)

programme, manure & fertilizer, plant protection, agricultural implements, land development, consolidation of holdings, irrigation, intensive agricultural district programme, high yielding variety programme.* Like wise the Fifth Five Year Plan of Uttar Pradesh has also emphasised on 'growth with social justice' and has laid down the following objectives for the State's Fifth Plan.

1. To provide gainful employment to the unemployed and under-employed and to increase the productive capacity of small cultivators and rural artisans to ensure them a minimum level of private consumption.
2. To accelerate the economic development by—(a) strengthening the basic infra-structure of power, irrigation, roads, marketing and credit; (b) increasing agricultural production by about 6 per cent per annum; and (c) raising the industrial production by about 8 per cent per annum.
3. To provide basic minimum needs at the district level within the resources available.
4. To reduce the regional disparities in the level of development by accelerating the identified sectoral programmes in the backward regions.
5. To contain birth rate,
6. To secure people's participation.

The Annual Plan for 1974-75, will attempt to reduce unemployment and under-employment by intensifying the following programmes during the year :

* See Appendix

- a). Agriculture production,
- b). Minor irrigation,
- c). Soil conservation
- d). Command Area Development
- e). Dairying Animal Husbandry and Fisheries,
- f). Forestry,
- g). Small Scale and Cottage Industries.¹

The crux of Uttar Pradesh's problem is her vast number of small cultivators who work on uneconomic holdings. They remain idle for about 118 days in a year and are unable to purchase farm requirements due to their poverty. The facilities of farm implements, fertilisers, improved seeds and irrigation were beyond their approach due to their low purchasing power and inadequate facilities to individual small & sub-marginal farmers. As the structure of Uttar Pradesh's agricultural economy is laden with disincentives and is inimical to capital formation, therefore, it is idle to talk merely of improved seeds, implements, manures and irrigation facilities for increasing the agricultural production. The agriculturist must be provided with the necessary incentives to combat the structural defects of agriculture caused by:

- (a) Decay of the tenurial system, and
- (b) decline in the size and distribution of the cultivation units & fragmentation of holdings.

To overcome these defects it is proposed to discuss the role of cooperative farming as a means of providing a workable solution to the agriculture of Uttar Pradesh in the subsequent chapter.

¹. Fifth Five Year Plan Uttar Pradesh, Annual Plan

CHAPTER II

COOPERATIVE FARMING RETROSPECT & PROSPECTS

In the previous chapter it was concluded that agriculture in India suffers from a large number of handicaps. The structure of Uttar Pradesh's agricultural economy is particularly laden with disincentives and is inimical to capital formation. Uttar Pradesh must revitalise her agriculture not only to be self-sufficient in food grains but also to develop her industries by supplying raw material in large quantities. It is in this context that the present chapter attempts to analyse the progress and prospects of cooperative farming which provides an organisation to farmers for their self-development. As the study of the principles of cooperation, however briefly is important for a better understanding of the concept of cooperation in the field of farming, therefore, the traditional form of cooperation in farming and new concepts

which have emerged out of it have also been discussed before examining the development of cooperative farming in India.

MEANING AND DEFINITION OF COOPERATION

Literally cooperation means working together. To be more appropriate, we may define cooperation as acting together to accomplish the common goal through cooperative principles. Likewise, a cooperative society may be defined as an organisation of individuals, commonly, labourers or persons of small means, formed for running in common of a business, the profits being shared in accordance with the amount of labour or capital contributed by each.

Cooperation has been defined in a number of ways from time to time. For a proper understanding of the meaning of cooperation, some of the definitions given in various laws of different countries are given below.¹

1. The basic rules of cooperative institutions date back farther than any legislation on cooperation. In Great

By the Japanese Law of 1921 a Cooperative Society is an association having legal existence, formed by persons of modest means in order to promote and develop, according to the principles of mutuality the exercise by the members of their occupations and the improvement of their economic conditions.

The British Columbia Agricultural Association Act (1911) provides that an association shall be deemed to be formed upon the cooperative system if provision is made by its constitution and bye-law for securing to all producers, who are members of the association, a share in the profits of the association in proportion to the value of the produce supplied by them, after payment of a dividend upon the capital stock not exceeding six per cent per annum. Provision shall be made for enabling all producers in

Britain there is evidence that as early as 1760 the workers of Woolwich and Chatham possessed their own flour mill, but it was not until 92 years later, in 1852, that the law established the right of collective ownership and granted the cooperative societies corporate personality (which the 300-old cooperatives already in existence by 1830 did not possess).

the district to become members of the association by limiting the number of shares to be held by any single member, or by other effective regulations.

The Rumanian Code proposes to define cooperative societies as associations with a variable amount of capital with no limit to the number of members, who may join or leave them at any date. Their object is to carry on joint work on a definite plan, with a view to furthering the economic and social interest of their members.

The Swiss definition is: A Cooperative Society is one constituted by a varying number of persons organised corporately which aims principally at contributing towards the economic prosperity of its members by joint action. The formation of cooperative societies with capital fixed in advance is prohibited.

Under the Belgian Code, "a cooperative society is one which is composed of members whose number and holdings are variable and whose shares are non-transferable to third parties."

The definition of a cooperative society in German Law emphasised: (a) an open membership, (b) furtherance of the commercial interests of members by means of a common business undertaking.

The Austrian Act refers to associations with an unlimited number of members, the object of which is the promotion of the industry or trade of their members by means of common action or credit.

In U.S.S.R. a cooperative has been defined as "a voluntary association chiefly of the working people, set up for the purpose of improving the living conditions of its members-shareholders, who on equal footing participate in the management of enterprises they established."¹

The Indian Act suggests (Section 4) that a cooperative society is a society which has as its objects the promotion of the economic interests of its members in

1. Fundamentals of Theory and History of Consumers' Cooperation (translated from Russian language), Moscow Cooperative Institute, Moscow, 1965, p.1.

accordance with cooperative principles. But it leaves to the Registrar the decision as to what cooperative principles are.

Eminent thinkers on cooperation have defined cooperation as follows:

Dr. Fay¹ from the socio-economic standpoint defines a cooperative society as an association for the purpose of joint trading originating among the weak and conducted always in an unselfish spirit, on such terms that all who are prepared to assume the duties of membership may share in its rewards in proportion to the degree in which they make use of their association. Mr. Herrick² says, cooperation is the act of persons voluntarily united, of utilising reciprocally their own forces, resources, or both, under their mutual management to their common profit or loss. Calvert says that "cooperation is a form of organisation wherein persons voluntarily associate together as human beings, on a basis of equality for the promotion of the economic interest of themselves. Sir Horace Plunkett's definition of cooperation is "self-help made effective by organisation."

1. Fay, C.R., Cooperation At Home and Abroad, P.S.King & Sons, London. p. 5.

2. Rural Credit, p. 247.

George Jacob Helyeake,¹ the famous historian of English cooperation, describes cooperation both positively and negatively in the following terms:

"Cooperation touches no man's fortune; seeks no plunder; causes no disturbance in society; gives no trouble to statesman; it enters into no secret association; it needs no trade unions to protect its interest; it contemplates no violence; it subverts no order; it envies no dignity; it accepts no gift, nor asks any favour; it keeps no terms with the idle, and it will break no faith with the industrious.

Capitalists hired labour, paid its market price, and took all the profits. Cooperative labour proposes to hire capital, pay its market price and itself take all the profits. It is more reasonable and better for society and progress that men own capital than that capital should own men.

The leading aims of cooperation is not merely to increase present comfort (Albeit not a disagreeable thing to do), it seeks also to ensure competence. Those who do not provide for the further of themselves and families - as far as they can or as far as they ought - are not merely

1. Talmaki, S.S., Cooperation in India and Abroad, 1231, pp. 18, 19.

dependent, they are mean, since they leave to chance, or the charity of others, to provide for them when the evil day comes.

Cooperators have made money by their methods of business; they have won honours by being the first of the working class who cared for education as a higher form of property."

From the above discussion it may be concluded that cooperation has been defined in different ways to suit the individual requirements of a country. However, the above definitions indicate the basic principles of cooperation essential for the movement. They are enumerated as below.¹

PRINCIPLES OF COOPERATION

1. Voluntary Association — Cooperative organisation is essentially a voluntary association and there is no compulsion on anybody to join a cooperative society or, once having joined, to continue as such. The members are also free to take advantage of the services of the society to the extent considered necessary by them.

1. For details see: Cooperative Societies Law in India, Row's Encyclopaedia, Vol. I, Law Publishers, Allahabad, 1966.

NOTE: In U.S.S.R. the basic principles of cooperation are:

1. Each cooperative is aimed at meeting some and at

Voluntarism is thus considered to be a cardinal principle of cooperation and is based on the phenomenon of human behaviour.

The principle is, however, undergoing change and is substituted by a small measure of compulsion to iron out the stubbornness of a negligible minority who are a hindrance to speedy results. Also, in countries which resort to planning, this principle is being modified in practice because it is felt that it hampers the growth of planning. It is no wonder that in the socialistic countries a degree of compulsion is a must to make the movement a success.

improving their living conditions.

2. Admission to and resignation from cooperative is voluntary.
3. Cooperative members make material contribution to the cooperative means.
4. Cooperative members bear material responsibility for the activities of their cooperative.
5. Management of cooperatives is exercised on democratic principles.
6. Besides satisfying various material requirements, cooperatives take care of the improvement of the cultural level of their members.

The regulations of International Cooperative Alliance (ICA) provide that only these cooperative organisations which recognise the principles of Rochdale pioneers can secure membership of ICA. As a matter of fact the Rochdale pioneers have not left any document prescribing for the principles of cooperation. The cooperative principles were worded by Helyoke, the great historian of England on

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2. DEMOCRATIC MANAGEMENT: Another important principle of cooperation is that the administration of cooperative societies is to be carried on democratically. The supreme authority in a cooperative society is its general body of members who may, remain within the Act, Rules and Bye-laws take suitable decisions for governing the affairs of the society. Each member present in the general meeting is given only one vote irrespective of the number of shares held by him. The managing committees also carry on day to day administration under the powers derived by them from the general body.

In this principle, we find an important deviation from the concept of joint-stock company. Whereas in a cooperative society the administration is carried on by the general body of members on the basis of one man one vote, the administration of a joint-stock company is in the hands of professional managers who are controlled by the Board of directors.

Cooperation, as the principles of Rochdale pioneers. No doubt, these principles form the corner stone but for all time they cannot stand valid without additions or modifications. The matter was discussed in the 14th Congress of ICA. Later on the 15th Congress of ICA held in 1937 approved four obligatory and three non-obligatory principles of cooperation. Again the matter was taken up during the 22nd Congress held at Bournemouth in 1963. The Congress recommended for drafting the principles and a commission of five members approved by the Central Committee was appointed for the purpose with Prof. Karve (India), as Chairman, The Commission recommended the following:

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3. SELF-HELP AND MUTUAL-HELP: Cooperation implies an enterprise of those who are financially weak and cannot derive material advantage which the rich people, with all their resources and connections can. In order to convert their weakness into strength, the members pool their resources and work together for mutual benefit. Mutual aid is the ultimate benefit which will come out of the collective efforts and will be shared by all the participants in the venture. This principle, therefore, envisages that the members should try to draw advantage out of the great pool created by the common efforts of all concerned.

I. Principles of cooperative movement must not be divided into obligatory and non-obligatory.

II. The following principles which were formerly included in the ICA regulations must not be included into the new regulations:

- i). Political and religious neutrality as this cannot be the principle of a movement of international character.
- ii). Trading for cash — because a number of organisations can provide credit facilities to their members.
- iii). To admit six obligatory principles of International Cooperative Movement as given below:
 - (a) Voluntary membership.
 - (b) Democratic management.
 - (c) Limited interest on shares.
 - (d) Distribution of profit in the following ways:

...contd.

4. NO PROFIT MOTIVE: Joint-stock companies are formed for earning profit for the share-holders. A cooperative society, on the other hand is organised not to earn profits but to enable the members to improve their economic condition through self and mutual help. A credit society, for example, is formed not to earn profits out of its money-lending business but to enable members to raise their resources and earn more by the productive investment of the loans obtained. Similarly, a cooperative store is organised to provide the necessities of life to members at reasonable price.

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- i) Deductions for the expansion of cooperative activity.
 - ii) Deduction for the general needs of members.
 - iii) Distribution of profit among members in proportion to their participation in the society.
- (e) Cooperative education of members, non-members and other personnel.

And the sixth principle which was not earlier given in the ICA regulations was added which runs as follows:

- (f) All cooperative organisations must by all practical means actively cooperate with other cooperatives at local, national and international level in order to serve the interest of their members.

In short the recommendations of the Commission fulfil the long awaited desire of the communist block to secure majority votes in the ICA through membership of new countries who have been refused membership earlier. It will create conditions in which communist party can play a favourable role in the developing countries who have won their freedom.

This, however, does not mean that these societies are not earning profit or refuse to earn a profit. An efficiently managed society must earn profit. The profit, however, is meant to meet unforeseen losses, if any, at a later stage. They are also utilised to strengthen the funds of the society, so that it may be able to render better and cheaper service to members in the shape of dividend or bonus. Hence the earning of profit should not be denied which is the result of efficient management, but the profit motive to exploit the weakness of members should be discarded.

5. OPEN DOOR POLICY: The doors of society which happens to acquire a flourishing business are not shut to new comers. Similarly persons of all castes, sexes, religions and political parties are allowed entry. The members must possess the necessary qualifications prescribed for them, e.g., the member must be of sound mind, must have attained majority etc.

In some types of societies, restrictions have been placed on the entry of certain undesirable or competing elements. For example, in labour societies the contractors are not allowed to become members and in credit societies money-lenders cannot gain entry.

6. PUBLICITY: The principle of publicity is as important as any other. A cooperative society is a voluntary

organisation and members cannot be kept together by compulsion. Publicity of cooperative principles is the only alternative. Cooperation is meant for the poor, illiterate people who know very little of the complicated principles and practices of cooperation. In order to secure their intelligent participation in the working of societies, it is necessary that a continuous system of education be evolved and members be kept informed of the decisions and activities of the society. Cooperative societies, therefore, spend sufficient money on education of members and office-bearers. At places, the societies have started education funds to which contribution is made every year out of profits. Stress is also placed on frequent general meetings and the presence of a maximum number of members therein, so that they may be able to participate in the discussions and keep their information up-to-date. Proxies are disallowed in these meetings for the same persons. These are healthy measures for popularising the movement.

7. NEUTRALITY: Another cooperative principle is that the cooperative movement should remain above party politics as well as religion. Cooperation is an international movement and its object is the economic and social uplift of human beings. It cannot, therefore, deny its advantages

to some persons simply because they belong to a certain class or order.

This principle also has been worked out on the basis of experience which shows that alignment with a political or religious party is never free from danger, in so far, as the achievement of objectives of the movement is concerned. Cooperators should, therefore, keep away from political and religious influence. Neutrality should be observed not only in politics and religion but in business also. It is on the basis of this principle that the cooperative movement has flourished in democratic countries. Indian cooperative movement has not purged politics from its folds. It is not running strictly on the principle of neutrality and business organisation.

8. EQUALITY: The principle of equality, which is often hailed as a hall-mark of democracy, is best applicable to cooperative society. Within the society relationship between the members is governed by the rule of equality. Every members, of whatever social and financial status he may be and irrespective of the extent of share capital contributed by him, has equal rights in the association. There is no discrimination on the basis of class, colour, sex, race or creed. Every member has got an equally forceful voice in the affairs and has got only one vote in the meeting. As a member, everyone has got an equal

opportunity to take advantage of the services rendered by the society. Profits are also divided among the members in proportion to their dealings with the society. Similarly, the ban on discussions of political and religious nature within the society or on carrying on business in competition with the society is equally imposed on all the members.

Dr. Leo Berube of the Canadian Council of cooperation has ably summed up the principles on which a cooperative institution should be based: "freedom of association and of enterprise, fruitfulness of self-help and joint action in the economic field; priority of man over money in the economic field; service instead of profit as economic motive; importance of putting back authority over economic activities in the hands of those who have the economic needs; necessity of continuous effort in improving man's knowledge and behaviour as a condition of bettering institutions."¹

If we X-ray our cooperative movement in the light of the above principles we would come to the conclusion that much improvement is desired for the development of cooperative movement. To make it a living movement cooperation should be made a moral, social as well as economic movement. The history of the movement, as discussed below indicates the pace of social and economic progress through cooperation.

SOURCES OF PRINCIPLES:

The cooperatives may be classified into different groups or system — the Rochdale, the Raiffeisen and the Schulze - Delitzsch system¹. The differences between these systems were due to historical and economic factors and the basic character of all of them is more or less the same. Hence, the Rochdale principles as laid down earlier are the model one as they are verified by tests of broad application. The Rochdale pioneers, ever since their inception have guided the formation, development, extension and even identification of cooperatives throughout the world. With a view to determining the eligibility of a cooperative to the membership of the International Cooperative Alliance (ICA), a special committee of the ICA, from 1931 to 1934, studied the "Present Application of

1. See Indian Cooperative Laws vis a vis cooperative principles, ICA, New Delhi; The conclusions of the commission on cooperation principles, Annals of Public and Cooperative Economy No.2, 1966, Belgium; Report of ICA Commission on principles of cooperation and Dr. KK.Saxena, Evolution of Cooperative Thoughts, Somaiya Publications, Private Limited, Bombay, 1974, pp. 61-80.

the Rochdale Principles", The Committee made its first report to the Congress of 1934, at the London session, and presented the final report to the Congress of 1937 at Paris. The Committee considered the evolution of cooperation from the Rochdale Pioneers to modern times, and in its Report enumerated seven principles in all as comprising the Rochdale System. The Committee felt that the following four principles be regarded as obligatory and important:

1. Open Membership;
2. Democratic Control;
3. Distribution of Surplus in proportion to members' transactions, and
4. Limited interest on Capital.

In the opinion of the Committee the following three principles are of lesser significance:

5. Political and Religious Neutrality;
6. Cash Trading, and
7. Promotion of Education.

In the opinion of the Committee these principles though "undoubtedly part of Rochdale system..... are however, not a condition for the membership of the I.C.A." The Committee remarked that, "they were essential methods of action and organization rather than

standards, the non-observance of which would destroy the cooperative character of a society." The Congress omitted the eighth principle, viz., the supply of pure and unadulterated goods, in view of the various anti-adulteration laws in force today.

Since 1937 upto the modern times, numerous changes have taken place in the economies of the various countries of the world. The world war II changed the socio-economic and political conditions of the various nations and cooperatives were faced with new challenges. New technology and new techniques of management have all forced the cooperatives to adjust to the changing times. Structural changes have taken place involving consolidation, concentration, integration and diversification of activities of cooperative institutions. In view of this, the need for a review was felt at the Bournemouth 22nd Congress of ICA, held in 1963, with a Russian resolution asking the Central Committee to set up an independent commission "to formulate the fundamental principles of activity of cooperation under modern conditions." In accordance with this resolution, the Central Committee of the ICA appointed, in 1964, a Commission on Cooperative Principles. The Commission was empowered to study the validity of the Rochdale principles and suggest substitution, deletion or addi-

tion of principles if necessary. The Commission reported to the 23rd Congress of the ICA held at Vienna in 1966, and the report was accepted by the Congress,¹ in which the principles as mentioned earlier were highlighted.

The report of the Commission of 1966 said that these principles should continue to be considered as essential to genuine and effective cooperative practices, both at the present time and in the future as far as that be foreseen. It implies that in order to keep the principles dynamic to suit the requirements of the changing world the necessary modifications, if any, in future may be welcomed. The past history also guides us to the fact that the principles of cooperation cannot be static otherwise cooperatism will come to an end. The recent changes on the socio-economic map of the world are bound to demand further interpretation of the principles of cooperation. The

1. Dr. Saxena K.K., Evolution of Cooperative thoughts, Somaiya Publications Private Limited, Bombay, 1974 pp. 61-62.

principle of political neutrality was disregarded by U.K. & USSR, while the principle of Democratic management has been interpreted by Russians and Arabs in their own fashion. In fact the constitution of the country; desire to bring economic reforms within a limited time and carry out the work of co-operatives without enlightened membership have influenced the working of cooperatives in these countries. The principle of Democratic management has not delivered goods to many cooperatives. Likewise the compulsion has also been introduced in cooperatives in certain spheres to achieve the National Goals and the voluntary character of the organisations has been changed in the interest of the nation. But all these under currents of the cooperative philosophy are not new. In fact cooperative principles are dynamic and can absorb all such under currents to maintain the fountain of cooperatism as a source of inspiration for all developed and

developing nations.

HISTORICAL GROWTH:

Cooperation has not an accidental birth. Although the circumstances differ but every country has an economic history behind the development of this event.

In most of the countries with Western civilisation cooperative institutions arose as spontaneous and unaided reactions of varying degree of complexity. But this was not so everywhere, even in Europe. In England Rochdale Pioneers made a successful attempt of organising cooperative stores on the principle of political neutrality but later on it gave birth to a political party.

In Germany through the initiative, the perseverance and inventiveness of a mayor in the Rhineland, Raiffeisen, the most widespread type of cooperative, the rural thrift and credit cooperative, was created after repeated trial and error. But in Bulgaria the cooperative movement was launched by government agencies, partly based on or in the tradition of the ancient Mohammadan institution of the corn granary. In Finland, where one of the most sturdy and efficient cooperative movement has grown up, the initiative came from a group of intellectuals: in Hungary it came from a paternalistic aristocracy. It is, however, important to record that in these countries

the cooperative institution found its final form and its vitality only when the initial impulse discarded its paternalistic features and began to express the forces at the root of the people's consciousness.

In Asia, Africa and particularly in the countries which belong or belonged to the British Commonwealth, specialised governmental departments took over the task of promoting and guiding the cooperative movement until it could stand on its own feet. India has not been an exception to it which is evident from the following discussion:

INDIA

Long before the official inauguration of the Cooperative Movement in India, there existed a number of associations, though not strictly speaking cooperative societies in the modern terminology, which served the purpose of satisfying the financial needs of the members in accordance with a mutual arrangement. Chit Funds and Nidhis are some such associations.

Cooperation in the socio-economic activities of the people of ancient India took four principal forms: KULA, GRAMA, SRENI and JATI.¹ Moreover, the concept of BAITUL-

1. KULA was a group of kinsmen, friends and relatives. This later on became more or less political in nature.

MAL* and its development in India during Muslim Period can also be treated as an example of 'Cooperation'.

The Cooperative societies with their characteristic features are comparatively of a recent origin. One of the pioneer societies that came into existence in northern India was in Hoshiarpur (Punjab) in the year 1892. Three more in Multan and two in Mianwali in Punjab sprang up in 1898 and 1900 respectively. In 1901 cooperative societies were started in Uttar Pradesh on an experimental basis by Mr. Duperne. The first Cooperative Societies Act (X) was passed as late as 1904. With the passing of this Act a number of societies came into existence, and within two years (1906-07) the number of societies rose to 843. Their working capital was 23.71 lakhs in 1906-07 with a membership of 90.8 thousands. In brief the movement outgrew the expectations of its promoters and the

The aspects of economic and social cooperation gradually narrowed to the limits of the Joint Family.

GRAMA was undertaking many activities, But it was also a cooperative organisation because it undertook works for the economic and social progress of the village.

SRENI. It belongs to post-Vedic period. It worked as a guild of merchants, artisans, bankers. The Arth-shashtra of Kautilya defines SRENI as a guild of workmen and artisans. The MAHABHARATA uses the term in the sense of guild of merchants. It was a sort of cooperative organisation of artisans and merchants.

JATI. It was based on caste. Although the term is of

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Act was found inadequate to cover various non-credit activities. For example, there was no provision in the Act for the formation of Federations or central societies for supervision, control and finance. The basic classification of the societies into rural and urban was arbitrary. To remedy these and other minor defects, the Government of India re-examined the whole position and passed the Cooperative Societies Act of 1912.

The Cooperative Societies Act II of 1912 was drafted with the intention of removing the deficiencies of the old Act, while retaining its main features, viz., simplicity, clarity and elasticity. The object of the Act as mentioned in the preamble was to give legal protection and facilities for the formation of cooperative societies for promoting thrift and self-help among agriculturists, artisans and persons of limited means. Thus provisions were made for the registration of all types of cooperative societies. It also facilitated the growth of central financing agencies and supervising unions by making provision for their registration. The division of societies into Rural and Urban was removed and substituted by a new division in accordance with the form of liability adopted.

uncertain origin, but it was an organisation working for the economic uplift of its members which represented one caste.

For details see: Traditional Forms of Cooperation: Indian Cooperative Union, New Delhi, 1962.

*. **BAITULMAL** — A common fund created by Islamic Law for the

The provincial governments were given wide powers regarding the working of societies, settlement of disputes by arbitration and altering byelaws of the societies in connection with the distribution of dividend etc. The use of the word 'Cooperative', was prohibited under the Act to any business concern except a society registered under this Act. A number of minor improvements were also made in audit and registration, etc.

The immediate effect of the Act was to infuse fresh energy into the movement. New types of societies like cattle insurance, sale of produce, the purchase of manure and retailing of farmer's implements and common necessities sprang up with increased capital and membership. The Government was keenly watching the progress of the movement. To examine whether the movement was developing on sound lines and to suggest measures for further improvement the Government appointed MacLagan Committee in 1914. The Committee classified societies as: (a) Primary societies, (b) unions, (c) central banks, and (d) provincial banks, and made recommendation regarding their constitution, financial arrangement, audit and supervision which were adopted by cooperative departments in all the provinces.

Under the Government of India Act of 1919 (Montague-Chelmsford Reforms), Cooperation was transferred to the

provincial governments and since then it has been patronised by the provincial (now State) Governments. The first Provincial Cooperative Societies Act was passed in 1925 in the Bombay Presidency followed by Madras, Bihar and others. Various steps were taken by the provincial governments to strengthen the movement. As a result of it the number of societies increased from 28,000 in 1919 to 94,000 in 1929-30.

The post-war boom and rising prices improved the condition of cooperative societies during the decade ending 1929-30. But the great depression of the thirties gave a big jolt to cooperative activity, and stalled further progress of the movement. To rehabilitate the movement several provinces appointed Committees of Enquiry.

From 1935-1939, there were three main developments in the field of cooperation. In 1935, the Reserve Bank of India was established and its Agricultural Credit Department was charged with the duty of studying various problems relating to agricultural credit. In 1936, the need for the development of long-term credit through Cooperative Land Mortgage Bank was stressed and the concept of primary societies being organised as multi-purpose co-operatives came to be increasingly accepted.

During 1939-45 the cooperative movement began to pay

greater attention to production and distribution. Many credit, purchase and sale societies began dealing in scarce commodities in addition to transacting usual business. A number of cooperative stores, milk supply, cane growers, fruit and vegetable growers, weavers and other industries were developed during this period. Later on the Cooperative Planning Committee (1945) submitted its comprehensive report recommending for more financial help to the movement and introduction of cooperative farming.

Since the attainment of independence and acceptance of the socialistic pattern of society as our goal the need for accelerating the pace of cooperative movement in the field of farming and industry was keenly felt. This is understandable. For in an agricultural country like India a self-sustaining State pre-supposes a strong foundation of agriculture. For this, an increase in agricultural production is vital and must take place at a much more rapid pace than so far. To achieve this aim it is necessary to provide appropriate organisational and administrative machinery for implementing the various programmes like the supply of fertilisers, better seeds, irrigation, better agriculture tools and adequate credit etc. To achieve this end the All-India National Congress (1959) resolved for starting service cooperatives which

were organised in India as a first step towards cooperative farming. The basic aim of these societies is to make a base for the rational development of cooperative farming which has a traditional history in India.

It can be concluded from the above analysis that the theory and practice have constantly undergone a change. From the very inception of the movement there was no universality in the theory and practice of cooperation. They differed from country to country. Cooperative movement is now subject to international politics and forces are working in ICA to redefine the principles of cooperation in the context of their application to the modern world. All that is needed is to understand and apply the principles as discussed above and avoid introducing new ideas which may have little practicability.¹ This does not, however, mean that there is no need for reformulation of cooperative principles. Cooperatives principles are dynamic and can satisfy the needs of a dynamic society.

1- Saxena, K.K. Evolution of Cooperative Thought, Somaiya Publications Pvt. Ltd. New Delhi 1974 Page 79.

TRADITIONAL FORMS OF COOPERATION IN FARMING

To give an insight into the historical background of cooperative farming the traditional form of cooperation in farming is discussed below. The traditional form of cooperation in farming has a long history in India. In DAN district of Bombay and in many other Adivasi areas as well as in the N.E.F.A. the joint cultivation of land has been practised before the passing of the Cooperative Societies Act 1904. Indian farmers are known to cooperate with one another to make good deficiencies in bullocks, implements, seeds, as also to improve irrigation facilities, counteract water logging, weed out havoc of wild life nuisance, etc. Temple lands and village common lands were also cultivated jointly. It has been noticed that in Madhya Pradesh and Uttar Pradesh at the time of harvesting, teams of labourers move from Jhansi and Lalitpur districts to Sagar, Bhilsa and other areas. They take up harvesting of a crop in a village and move on to the next and so on. Remuneration is received by them in terms of percentage of the total crop harvested. Each group has a leader who negotiates the terms with the local cultivators and distributes the income among the participants. In Bombay (Nagpur and Vidarbha region) also the agricultural operations such

as deep ploughing, removal of weeds or reclamation of patches of waste lands are undertaken by a group of people usually landless workers, on piece work basis. This is locally known as Hunda. In Punjab also, a system of joint work at the time of harvesting and weeding operations exists and is known as Mang and Ahwat.

In western parts of Kolhapur district of Bombay State (now part of Gujrat) joint farming has been widely practised in regard to sugarcane for over 100 years at least. The method is known as Phad.¹ The participants in a Phad pool together their resources of land, labour and equipment. All cultivation operations are jointly carried out and after meeting the working expenses, the net amount is divided equally among the members. Data available for 19 villages in this area indicates that out of 2,486 acres under sugarcane, more than 90 per cent was cultivated jointly through Phads. According to the information received from the Bombay State Cooperative Bank, there were 1,000 Phads in Kolhapur district. Although most of these Phads are not registered as cooperative societies, the system is recognised by the trade and the

1. For details see Report of the Working Group on Cooperative Farming, Vol. I, Ministry of Community Development and Cooperation, Government of India, 1959, p.24.

local custom. The leader of Phad occupies an important position not only in the village but as a representative of a group commands a great deal of influence.

In certain areas of Anantpur district of Andhra Pradesh, joint cultivation has been practised on traditional lines. The system is known as Gonchi. In Pamidi Firka of Gooty Taluk, 206 acres are jointly cultivated in several villages. In one of them Pedavadugur 86 holders owning 35 acres, commanded by a government minor irrigation source, have worked this arrangement for a long time. There are no ridges to indicate boundaries of fields separately; survey stones of the boundary area, in some cases, are just in the middle of the plot. The entire area is treated as one unit and is divided into convenient blocks for ploughing, sowing and irrigation purposes. Each share-holder contributes his labour and a bullock. There is a leader-in-charge who is responsible for supervision and has the authority to impose in case of absence a fine to be realised out of the gross produce. In another district, Karimanagar of the same State, in village Alganoon 82 protected tenants have been cultivating 145 acres of land jointly for the last 40 years.

Hence traditionally we are not averse to cooperative farming. However, modern thinking on cooperative farming

has made it a powerful weapon for the economic growth of India.

NEW THINKING ON COOPERATIVE FARMING

As stated above cooperative farming is not a new venture in India. Since long, our social and political leaders have emphasised the need for cooperative farming in our economy. Mahatma Gandhi has emphasised its utility in the following words:

"I firmly believe too that we shall not derive the full benefits of agriculture until we take to cooperative farming. Does it not stand to reason that it is far better for a hundred families in a village to cultivate their lands collectively and divide the income therefrom than to divide the land anyhow into a hundred portions? And what applies to land, applies equally to cattle. It is quite another matter that it may be difficult to convince people to adopt this way of life straight away."¹

Later on in 1944 the Advisory Board of the Imperial Council of Agricultural Research (now Indian Council of Agricultural Research) favoured the idea of extending cooperative activity in the sphere of farming. The Board mentioned it in their memorandum on the development of agriculture and animal husbandry in India.²

1. Report of the Indian Delegation to China on Agrarian Cooperatives, Government of India, Planning Commission.

In the 'Plan of Economic Development' formulated in 1944 by eight leading industrialists, popularly known as the 'Bombay Plan' the subject of cooperative farming also received attention. The Plan¹ said: 'Increase in agricultural production presupposes certain fundamental reforms. The most important question to be solved is that of the size of agricultural holdings. The average holding at present is not more than 8 acres scattered over the village in tiny fragments. Although there may be definite limits to the advantages arising out of consolidation of holdings and increase in their size, it is one of the main reforms which would be necessary for the adoption of intensive farming. To bring it about, cooperative farming appears to present lesser difficulties than any other method that may be suggested. It increases the size of the holding for purposes of cultivation without depriving the cultivators of their right to the ownership of their existing holdings. In order that cooperative farming should come into vogue as early as possible, some measure of compulsion appears desirable.

The Cooperative Planning Committee 1945 recommended that for a permanent solution of the problem of increased agricultural production, some form of large scale multi-

1. Quoting in the Report of the Working Group on Cooperative Farming, Vol. I, p. 21.

vation was necessary¹ and suggested cooperative farming as one of the four types (State Farming, Corporate farming, collective farming and cooperative farming) of large-scale farming for India. The Committee pointed out four types of cooperative farming societies, namely: (a) Better farming Society (b) Tenant Farming Society, (c) Joint Farming Society, and (d) Collective Farming Society.

The recommendations of this Committee made a landmark in the history of cooperation. All the four types of cooperative farming societies came into existence as a result of the recommendations made by this Committee.²

TYPES OF COOPERATIVE FARMING SOCIETIES

(a) Better Farming Society: The Society is designed to introduce improved methods of farming. Generally the society lays down the plan of cultivation agreeable to all. It may undertake joint purchase of seed, manure, insecticides, pesticides and weedicides. The work of pooling, cleaning, grading and selling of produce as well as joint ploughing, harvesting, joint arrangements for watch and

1. Report of the Cooperative Planning Committee appointed by the Government of India on the recommendation of the Fourteenth Registrars' Conference, Manager of Publications, Delhi, 1952, p. 24.

2. According to an enquiry carried out by UN Food and

ward, joint use of machinery may also be taken up by the society. One society may undertake one or a number of functions. Each member is, however, independent except for the specific purposes for which he joins the society. The members pay for the services which they receive from the society. Patronage dividend are given to members at the end of the year.

(b) Tenant Farming Society: For pursuing farming a society is formed which owns land in freehold or lease hold, but its holding is divided into smaller holdings, and given to members of the society. The society prepares plan for whole area, but the execution of the plan is left to the discretion of each individual tenant. The society arranges for the supply of farm requirements including costly implements for the members. The tenant pays a fixed rent for his holding. He is owner of the produce which may be sold through the society or in any way liked by him. This type of society replaces the superior land-lords and the profits after meeting all expenses and providing for a reserve fund are distributed among the tenant members in proportion to the rent paid by each member tenant.

Agriculture Organisation in 1951 there was approximately 300 cooperative farms with a total of 25,000 acres in India. Of these 220 are cooperative of joint farming type. The other cooperatives are of the collective farming type, Further were 460 cooperative farms of the

(c) Cooperative Joint Farming Society¹ A Cooperative joint farming society pools land of its members whose separate holdings are not large enough to permit an economic farming. Members work on the pooled land in accordance with the direction of an elected committee and the manager appointed by it. They work jointly and each member receives wages for his daily labour. The ownership of each member in his holding continues and is recognised by the payment of a dividend in proportion to the value of his land. The produce which is raised collectively is also disposed off collectively, and the proceeds after meeting all the expenses of cultivation including payment for the use of land, wages and cost of management and providing for a reserve fund are shared by the members in proportion to the wages earned by each. The ordinary functions of this form of society are the planning of a crop programme, the joint purchase of farm requirements and joint sale of farm produce, raising of funds on the security of land, crops and other movable and immovable assets of the society for land improvement,

individual type, known as 'better farming societies' and 'tenant farming societies', The development as the report says "is encouraged by the State Government by subsidies and other facilities." (Source: Progress in Land Reforms, United Nations N.Y.:1954, p. 247.

1. For details see Byelaws of the Cooperative Farming Societies

purchase of machinery and payment of operational expenses, land improvement and all other activities calculated to promote the development of agriculture. A subsidiary agreement is generally made between the society and each member that if any improvement is made on his plot of land he will repay its cost when he ceases to belong to the society.

In 1960 the Government of India has indicated the broad guiding principles in connection with the organisation of cooperative farming societies which may be summarised as follows:

1. The societies should be organised voluntarily. There should be no compulsion in any form.
2. The bulk of the members should be small cultivators or land-less persons.
3. Membership of cooperative farming societies should be confined to those who are prepared to work on the farm or in its ancillary activities. Absentee landowners should not ordinarily be admitted as members. Persons who are prevented from participation in farm work on account of physical disability, government service, age, sex, or owning land in more than one village may be admitted although they may not participate in farm work. The absentee landlords taken together as a group, should not exceed $\frac{1}{4}$ of the total membership of the society.

4. Land should be pooled for a minimum period of 5 years. Withdrawal during this period might be allowed in exceptional circumstances, e.g., a member leaving the village.
5. Intensive cultivation through labour intensive methods should be the main activity of the farm. However, ancillary activities like poultry, dairying, cottage and small scale industries should also be promoted. Maximum utilisation of local resources should be stressed.
6. Good working conditions and better human relations should be created to reduce tensions and facilitate working together.
7. Societies organised merely for securing financial assistance should not be helped.
8. The programme of consolidation of holdings should be coordinated with cooperative farming. It will be desirable to start pilot project societies in areas where consolidation work has been completed or where it is in progress. Consolidation of holdings should, however, not be a pre-requisite to the formation of societies.

(d) Collective Farming Society: In collective farming the society holds the land on free-hold or lease holds basis and also the other means of production. It undertakes joint cultivation. As the individual membership is not there no return is paid on this account and the profits are distributed in proportion to the work done by the members. Such societies are generally formed on

Government land or land newly brought under cultivation. But this must not be confused with the collective farms of Soviet Union known as 'Kolkhozes'. No doubt, there are certain points of similarity but these cannot wipe out the chief difference. This consists in the fact that the cooperative is an association of free and autonomous economic units whereas the Kolkhoz consists of members who have lost their economic autonomy. The collective farms (kolkhozes) are a typical product of the Socialist reconstruction of Russia which came into existence under Lenin's Cooperation Plan. At present they are subject to government control and are working under the guidance of the communist party.

In the above mentioned four types of cooperative farming the 'service cooperative' can be added as the fifth category of cooperative farming society. In a service cooperative society the individual members maintain title of their land; management is done on an individual form on family basis; but marketing, supplies, credit, processing and other services are provided to members by the society.

Dr. Otto Schiller, Professor of Agricultural Economics, West Germany, has advocated for a new type of

cooperative farming namely 'individual farming on cooperative lines for the speedy development of agriculture. The essence of individual farming on cooperative lines, may be described as follows: 'All functions, which cannot be executed in the limited boundries of a single small farm, or are beyond the capacity of the small holder, such as planning including field arrangements and cropping scheme, the financing of investments, the keeping of large sized equipments, the wholesale supply and marketing etc., should be turned over to the cooperative society for improved individual farming. All other functions of farm management which can properly be executed within the boundries of a single small farm should remain with the independent individual¹

Broadly speaking, all these types of cooperative farming societies represent different degrees of cooperation. The farming societies like service cooperatives and better farming need lesser degree of cooperation than the joint farming and collective farming. However, collective farms of Russia are a category by themselves. They represent cooperation under controlled economy and

1. For details see Dr. Otto Schiller, Cooperative Farming and Individual Farming on Cooperative Lines, All-India Cooperation (New National Cooperative Union of India), New Delhi, p. 17.

Communist Party dictatorship. The concept of 'individual farming on cooperative lines' is a mid-way between the two existing extremes which in course of time will lead to the development of cooperative-joint farming in India.

In fact the service cooperatives, cooperative better farming, tenant farming and 'Individual farming on cooperative lines' are not cooperative farming societies as they do not fulfil the fundamentals of a genuine cooperative farming society which consist of:

- (a) Pooling of land (and other resources) for joint management.
- (b) Joint managerial and manual work; and
- (c) Payment for work and resources pooled by the members.

For the purpose of this thesis, societies possessing the above three characteristics are taken as cooperative farming societies.

PART — III

PERIOD OF DEVELOPMENT

INTRODUCTION

In the light of the recommendations of the Congress Agrarian Reforms Committee appointed in 1948 and experiences gained from the working of the existing societies the policy of encouraging formation of cooperative joint farming was introduced during the First Five Year Plan.

FIRST FIVE-YEAR PLAN

In the First Five-Year Plan (1951-56) it was recognised that small holdings which are below the basic of the floor limit constitute one of the most difficult problems in the organisation of agriculture and if holdings are grouped into larger units of operation through cooperative activity and the individual farming rationalised, the economies and advantages of large-scale organisation would become available to them. Larger financial resources for agricultural development can be provided and the volume of employment can be increased. Keeping these in view, the First Plan suggested

that "small and middle farmers in particular should be encouraged and assisted to group themselves voluntarily into cooperative farming societies."¹

The Planning Commission recommended the general practice of cooperative farming in the following manner:

"While the controversy between voluntary and compulsory formation of cooperative farms may at this stage be avoided, it can be suggested that in any area where a majority of holders representing at least half of the total area under cultivation desire to establish a cooperative farm, legislative measure should be at their disposal to proceed with the formation of a cooperative farming society for the whole village. The State on its part should do everything in its power to encourage the establishment of such farms and to promote their satisfactory working afterwards."²

The objective put forth in the Plan was cooperative village management so that all the land, manpower and other resources of villages may be organised and developed for the benefit of the village community as a whole. As an immediate programme, both small and medium-farms are to be encouraged and assisted to group them-

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1. Report of the Working Group Vol. I, p.22.
 2. First Five Year Plan. p. 167.

selves voluntarily into cooperative farming societies. Gradually as cooperative farming will develop, the entire area of the village, both cultivated and uncultivated will be brought within the cooperative fold and managed as if it was a single farm.

Accordingly planned experiments were recommended during the First Plan with a view to evolving suitable methods and techniques of cooperative farming under Indian conditions. State Governments were requested later to draw up phased programmes for cooperative farming. But little action was taken in these directions. In most States there were groups of individuals who jointed together to form a cooperative farming society. A few of these societies have been successful, but many of them have experienced practical difficulties for which they have not always been able to secure the necessary guidance. The result was that after a time, efforts which begin with enthusiasm were given up as failures.

After the experience of First Five Year Plan, the Planning Commission appointed a committee to study in greater detail the methods adopted in China for developing agrarian cooperatives. The Report of the Indian delegation to China on agrarian cooperatives (1957) recommended as follows:

(a) A well laid demonstration Programme of co-operative farming societies should be worked out with the object of having at least one society in every group of 50 villages in the next four years. This would mean roughly about 10,000 societies.

(b) An effort should be made to organise as many societies as may be possible in community project area and the national extension blocks which have been in existence for 2 years.

(c) The principle of voluntariness should be scrupulously adhered to. A person should be free to leave society whenever he chooses to do so, but this should be permissible at the end of a season.

(d) Wherever a sizable area of Government land is available in which rights have not accrued to individual peasants, it should be settled with cooperatives consisting of landless agricultural workers for cooperative farming. Small owners and tenants should also be admitted to these cooperatives wherever they agree to pool their lands.

(e) A quick survey of the existing societies may be undertaken so that only the genuine societies are retained and are properly helped to serve as useful demonstration centres. The suggestions made by the delegation regarding State assistance, internal organisation and management etc., should be tried out in the first instance in these societies so that experience may be gained immediately and suitable techniques and methods evolved.¹

1. Report of the Indian Delegation to China on Agrarian

APPRAISAL OF PROGRESS DURING FIRST PLAN PERIOD:

The targets were achieved in the organisation of societies during First Plan because of the exemption of non-cultivating members of the cooperative societies from the application of certain provisions of the tenancy legislation¹ and policy of the Government in respect of leasing out agricultural waste land to cooperative farming societies. However, out of 1937 cooperative farming societies organised during First Plan 400 were located in Bombay, 289 in Punjab, 168 in Uttar Pradesh and the rest in Rajasthan and West Bengal. Most of the State Governments could not proceed beyond the stage of drawing up by laws etc., and the amount of Rs. 40 lakh provided during the Plan remained unutilised. In many cases these societies have led to evasion of tenancy legislation so that the members could engage themselves in activities other than farming.² Moreover, during this

Cooperatives, Government of India, May 1957, pp.186,187

NOTE: (a) This Committee was in favour of cooperative farming in which land is pooled together and used jointly under a well planned programme without effecting the rights of individual members on land.

(b) Two members of the Delegation submitted their note of dissent. The leader of the Delegation made his observations over the note of dissent in order to clarify the stand of majority of the group in favour of cooperative farming.

1. Laxminarayan & Kanunge, Glimpses of Cooperative

period all the four types of cooperative farming societies were encouraged. Under these conditions the Second Five Year Plan made a further headway in the organisation of these societies.

SECOND FIVE YEAR PLAN

By the time the Second Five Year Plan was drafted sufficient experience was gained in organising societies and making assessment of the problem involved in it.

The Second Five Year Plan laid down the task of providing a sound foundation for the development of cooperative farming so that over a period of 10 years or so a substantial portion of agricultural land is cultivated on cooperative lines.³ The following action was recommended in the Second Plan to achieve the aim.⁴

1. In each district and later on in each national extension and community project area experimental or pilot projects in cooperative farming

Farming in India, Asia Publishing House, Lucknow, 1967, p.110.

2. See: Government of India, Planning Commission, PEO, Studies in Cooperative Farming, 1956. (Also quoted in the Glimpses of Cooperative Farming in India, p. 111)
3. Second Five Year Plan, p. 201.
4. For details see: Second Five Year Plan.

should be undertaken with a view to evolving better methods of management and organisation. These centres should be developed into practical training centres for cooperative, agricultural and other extension workers.

2. As far as possible, surplus areas which become available on the imposition of ceilings on agricultural holdings should be settled along cooperative lines.
3. Farms smaller than the prescribed basic holding should be brought into cooperatives to which surplus lands are allotted, provided their owners agree to pool their lands. When consolidating holdings, lands belonging to persons with very small holdings should be located as near as possible to the pooled lands, so that those cultivators who may not join cooperative farms immediately may find it convenient to do so at a later stage.
4. Special attention should be given to existing cooperative farming societies, many of which are functioning indifferently, and steps should be taken to put as many of them as possible into good condition so that their success may serve as an incentive to others to form cooperative farming societies.
5. Groups of persons should be encouraged to form cooperative farming societies. These cooperative farming societies should be provided with technical and financial help for starting cottage industries, dairy farming and horticulture so

that the cooperatives may be in a position to provide non-agricultural employment to their members and others associated with them.

6. In tribal areas, where communal ownership is still the common practice, as settled cultivation is introduced, steps should be taken to develop agriculture on cooperative lines.
7. An extensive programme for training in cooperative farming should be organised.

The Indian National Congress, considered the question of future agrarian policy and discussed the place of cooperative farming in India. The Congress gave a serious thought to the problem which resulted in a clear cut policy on cooperative farming. From here begins the scientific development of cooperative joint farming in India.

In January 1959, the Nagpur Resolution of the Indian National Congress defined the role of cooperative farming in the country as follows:

"The future agrarian pattern should be that of cooperative joint farming in which the land will be pooled for joint cultivation, the farmers continuing to retain their property rights and getting a share from the net produce in proportion to their land. Further, those who actually

work on the land whether they own the land or not, will get a share in proportion to the work put in by them on the joint farm!"

"As a first step, prior to the institution of joint farming service cooperatives should be organised throughout the country. This stage should be completed within a period of three years. Even within this period, however, wherever possible and generally agreed to by the farmers, joint cultivation may be started."

Therefore, in March 1959, the Lok Sabha adopted the following resolution:

"This House recommends that during the next three years every possible effort should be made to organise service cooperatives all over the country and to develop the spirit of cooperation in general so that cooperative farms may be set up voluntarily by the people concerned wherever conditions are mature."

During discussions in the Lok Sabha, Shri Jawaharlal Nehru further emphasised the voluntary character of Cooperative Farming and stated:

"I shall go from field to field and peasant to peasant begging them to agree to it. Knowing that if they do not agree, I cannot put it in operation."

After the passing of the Nagpur Resolution and its approval by the National Development Council the Planning

Commission and the Ministry of Community Development and Cooperation (Department of Cooperation) took up the work of organising cooperative joint farming societies enthusiastically. A working group was also appointed by the Government of India in 1959 to help in the formulation of an action programme on cooperative joint farming. The group came to the conclusion that there is ample scope for the development of cooperative farms and made some recommendations (see Appendix 'E') which were more or less the same as already pursued during the plan. In 1960 the Ministry of Community Development and Cooperation indicated to the State Government the pattern of organisation, assistance etc., of cooperative joint farming societies (Appendix 'F'). Accordingly provisions were made in the Plan for providing financial, technical managerial help to the societies for their rapid growth. No doubt, the desired results were achieved. The number of societies increased from about 2,000 cooperative farming societies functioning in different parts of the country at the commencement of the Second Five Year Plan to 5,409 in 1960 (See Table). However, no specific provisions were made for organising only cooperative joint farming and collective farming societies. As a result of it societies other than these also increased from year to year and enjoyed the facilities which should not have

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TABLE Contd....

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12.	Punjab	613	30	144	30	679
13.	Rajasthan	116	103	21	439	817
14.	Uttar Pradesh	299	19	89	1	408
15.	West Bengal	40	43	116	4	203
UNION TERRITORIES						
1.	Andaman & Nicobar Islands	5	-	-	-	5
2.	Delhi	14	10	1	3	28
3.	Himachal Pradesh	-	-	7	-	7
4.	Manipur	1	11	-	4	16
5.	Lacadive, Minicoy & Amindivi Islands -	-	-	-	-	-
6.	Pondicherry	-	-	-	-	-
7.	Tripura	-	3	17	2	22
T O T A L		1,597	878	962	1,972	5,409

SOURCE: Report of All-India Seminar on Cooperative Farming, Hyderabad, 1960, P.

gone to them. This necessitated revision in the policy and a clear cut criteria for a cooperative farming society which may be eligible for financial help under this scheme. It was done, under the Third Five Year Plan.

THIRD FIVE YEAR PLAN:

A detailed programme for the development of Cooperative farming was formulated for the first time in the Third Plan. The Plan provided for the organisation of 318 pilot projects, one in each district, comprising in all 3,180 cooperative farming societies and for support and encouragement for cooperative farming societies which might come up voluntarily through local initiative. In order to boost up the programme of organising cooperative farming societies in pilot areas the Central Government¹ announced the programme of providing assistance and its sharing between Centre and State. These finances were made available during the Third Plan.

Moreover, finances were provided as Central Assistance for cooperative farming societies in non-pilot areas outside the State Plan ceilings. Consequently the number of societies shot up in pilot areas but some of the States preferred organisation of non-pilot societies to those in pilot areas. With a view to discourage this tendency the Conference of State Ministers of Cooperation held at

1. Vide letter No. F.3-6/60. C.F., dated June 17, 1961.

Lucknow in February 1963 recommended:

"The present distinction between non-pilot and pilot societies should be done away with and the two programmes should be treated alike. Government should participate in the share capital of non-pilot societies also and for the purpose additional funds should be made available. If that was not possible, it should be done by re-adjustments of the targets.¹

To implement the recommendation of the conference the Planning Commission revised the financial pattern.² (See Appendix 'G').

Moreover, provisions were made for providing finances for the construction of godown-cum-cattle shed. Later on it was decided that an amount of Rs. 3,750 out of the amount of Rs. 5,000.00 originally³ provided for the godown-

issued by the Ministry of Community Development and Cooperation (Department of Cooperation), (Cooperative Policy and Programme, Important letters and Schemes, Part II, NCUT, New Delhi, 1964), p. 44.

1. Cooperative Policy and Programmes, Part II, Important Letters and Schemes relating to Cooperative Development, Part II, NCUI-1964, p.40.
2. Vide letter No. 12-9(ii) 61-CD/AGr., dated March 25, 1963, issued by the Planning Commission, Government of India, Cooperative Policy and Programmes, Part II, Important Letters and Schemes relating to Cooperative Development Part II, NCUI, 1964, p. 40.
3. Vide letter No. F. 2-4/63-CF, dated September 5, 1963 issued by the Ministry of Community Development and Cooperation, Government of India, Cooperative Policy and Programmes, Part II, Important Letters and Schemes

cum-cattle shed may be allowed to be divided for land development by the State Governments on certain conditions provided satisfactory arrangements are made for storage of produce for keeping the cattle (See Appendix 'N').

In a few States, the cooperative farming programme had a good response, e.g., Punjab, Uttar Pradesh, Maharashtra, Rajasthan, Madhya Pradesh and Kerala. By the end of December 1965, 2,485 societies in the pilot areas covering 2,64,245 acres and 2,527 societies in non-pilot areas covering 2,80,840 acres were organised¹.

On the recommendations of State Minister's Conference the revised pattern of assistance came into practice during the Third Five Year Plan which was made effective from the year 1963-64. The main object of the revised pattern of assistance was to provide greater emphasis on the organisation of cooperative farming societies in the pilot areas.

In brief a number of measures were taken during the Third Plan to accelerate the tempo of organising cooperative farming societies, on the principles which lay behind the proposals of the working groups. For example, finances were provided, legislative measures were taken, continuous guidance was made available, incentives for

1. Fourth Five Year Plan (Draft Outline). p. 143.

organising societies in Bhoodan and Gramdan villages were provided, arrangements were made for training in cooperative farming and publicity work was intensified. Moreover, in 1963, it was suggested that development of agro-industries should be included in the production plan formulated by the cooperative farming societies.¹ But the programme of organising societies (Pilot projects) could not be achieved in a number of States.

The table given on pages 59, 60 indicates that the number of pilot societies, their membership and the area pooled was less in comparison to non-pilot societies. Moreover, the progress was unsatisfactory in a number of States. But in view of the fact that the programme was in its infancy, at that time it was not expected of it to have any impact on the economy of the country. However, it was essential to lay down a sound foundation for future development. However the Fourth Plan has taken into consideration the problems faced by these societies as pointed out by the Committee of Direction on cooperative farming.

FOURTH FIVE-YEAR PLAN

The Plan has stressed the role of cooperative

1. Cooperative Policy and Programmes, Important Letters and Schemes relating to cooperative development, Part II, NCUI, New Delhi 1964, p. 35.

TABLE 2

Cooperative Farming Societies in Pilot and Non-pilot Areas in the III Plan
(Progress upto 31st March, 1966)

S.No.	Name of State	Programme for pilot societies in the III Plan				Area (in acres)	Number ship	Member- ship	Area (in acres)
		1	2	3	4	5	6	7	8
1.	Andhra Pradesh	200	205	11,589	9,521	86	4,861	10,201,85	
2.	Assam	110	86	2,072	11,168	84	2,855	16,767,00	
3.	Bihar	250	41	933	1,881	39	693	2,477,00	
4.	Gujarat	250	62	1,103	14,305	74	1,238	17,67,500	
5.	Kerala	90	79	2,432	2,937	99	5,099	3,209,00	
6.	Jammu & Kashmir	80	10	351	1,544	3	138	1,779,00	
7.	Madhya Pradesh	300	245	4,082	34,658	180	3,312	18,020,00	
8.	Malhassashtra	300	269	4,040	27,918	518	10,456	78,018,13	
9.	Madras	120	46	1,387	3,641	7	157	451,00	
10.	Mysore	190	291	6,465	33,856	147	3,391	25,480,00	

Contd.....

TABLE contd....

#1	2	3	4	5	6	7	8	9
11.	Orissa	130	70	1,347	4,378	36	618	4,332.29
12.	Punjab	200	416	5,478	40,905	795	15,798	65,152.00
13.	Rajasthan	300	190	2,445	34,091	141	2,018	24,252.00
14.	Uttar Pradesh	450	594	10,516	50,455	466	8,194	38,595.00
15.	West Bengal	160	103	1,909	3,196	80	1,678	2,638.00
16.	UNION TERRITORIES							
16.	Delhi	10	7	132	739	3	11	104.00
17.	Himachal Pradesh	10	8	105	302	-	-	-
18.	Manipur	10	24	849	1,874	10	585	1,007.00
19.	Tripura	100	1	17	34	4	386	2,076.00
20.	Pondicherry	10	2	112	109	-	-	-
TOTAL		3,180	2,749	57,364	2,77,482	2,752	61,471	3,06,286.00

* SOURCE: Agenda, item No. 2 Report of Progress during the Third Plan, submitted to the 10th meeting of the Executive Committee of the National Cooperative Advisory Board, held on 28 December, 1966 (cyclostyled material, NCAD, Ministry of Community Development and Cooperation, Government of India, New Delhi).

farming in the reconstruction of the rural economy. It has been suggested that the programme of cooperative farming should not get isolated from the mainstream of agricultural development and should be looked upon as an important element in schemes for achieving new advances in agriculture. During Fourth Plan efforts were being made to promote cooperative farming as one of the important means of assistance to poorer sections of the farming community. The Plan says that 'apart from cooperative farming in the sense of pooling of land and joint cultivation there may be prospects for providing certain basic facilities, e.g., a common pumping set or a common tractor to group of cultivators to start with. As their activities grow, other functions can be added gradually and cooperative farming societies might come into existence as a result of this process.'¹

Before implementing the cooperative farming programme during the Fourth Plan, the Committee of Direction² appointed by the Government of India in 1963 under the

1. Fourth Five-Year Plan (A Draft Outline), p.144.

2. For details see report of the Committee of Direction on Cooperative Farming, Government of India, Ministry of Community Development and Cooperation, 1965.

Chairmanship of Professor D.R. Gadgil recommended in its report submitted in 1965 that special attention must be paid to consolidation rather than expansion and that whatever expansion is aimed at, should be based on purposive selection of areas in each State for starting intensive programmes.¹ This was taken into consideration. However, Planning Commission* suggested that 'the objective in the Fourth Plan should be to cover an additional one million acres of land under the operation of cooperative farming societies. In other words the objective was for cooperative societies, both existing societies and societies to be started newly, to cover about 1.5 million acres of land at the end of the Fourth plan.'

To cover one million acres of land under cooperative farming about 10,000 new societies were to be organised as the average under a society was expected about 100 acres. The phasing was suggested like this:

TABLE 3

1966-67	...	700
1967-68	...	1,500
1968-69	...	2,000
1969-70	...	2,500
1970-71	...	3,300
TOTAL		<u>10,000</u>

*. Vide letter No. 19-5(2)65 Agriculture, Government of

The greatest emphasis during the Plan has been in providing assistance to the small and uneconomic holders. Moreover, it was suggested to organise agro-industries as the capacity of cooperative farming societies to provide large employment has increased with the undertaking of programmes for land improvement and capital works and undertaking of allied activities such as dairying and sheep rearing and the development of non-farm occupations.

During the Fourth Plan, measures were taken to intensify the programme in Government 'Khas' and waste lands especially with landless labourers as members. The programme for resettlement of landless labourers was also integrated with the programme of cooperative farming as far as possible.

The pattern of assistance of cooperative farming in the Fourth Plan was also changed. The Central Government provided 75 per cent as loans and 25 per cent as grants where grant expenditure was involved. The total provision made for cooperative farming in the Fourth Plan (Draft Outline) was Rs. 18.00 crores in the Central sector and the State sector. The pattern of assistance in the Fourth Plan is given in the below given table (No. 4), including the pattern of assis-

India, Planning Commission of November 1, 1966, addressed to the Chief Secretaries to the Government of the States/Union Territories.

tance for State and district cooperative farming federations.

TABLE 4

I T E M	P A T T E R N		
	Loan	Credit	Total
	Rs.	Rs.	Rs.
1. Share Capital(Joint and Collective Farming Societies.	2,000	-	2,000
2. Land Development:			
(a) Joint	20,000	-	20,000*
(b) Collective	30,000	-	50,000**
3. Godown-cum-cattle shed	3,750	1,250	5,000
4. Managerial Subsidy & Loans:			
(a) Joint Farming	-	1,200	1,200
(b) Collective Farming	-	2,100	2,100
(c) State Federation	-	1,00,000	100,000
(d) District Federation	+1,00,000	20,000	30,000

*At Rs. 100.00 per acre subject to a ceiling of Rs. 20,000.00 per society.

**At Rs. 150.00 per acre subject to a ceiling of Rs. 30,000.00 per society.

+ This is for setting up a workshop for serving tractors etc.

SOURCE: Letter No. 19-5(2)/65 Agr., Government of India, Planning Commission, Yojna Bhawan, New Delhi of November 1, 1966, addressed to the Chief Secretary of the Government of all States/Union Territories.(Also see : Cooperative Development in India, NCUI, New Delhi, 1967).

In the Fourth Five Year Plan, the programmes of Cooperative Farming had been transferred to the State sector. Priority is being given to the revitalisation of the existing weak and dormant societies. Now societies were to be organised only in compact areas if they have a potential for growth. No specific targets have, however, been fixed in regard to the new organisations. Promotion of collective farming societies is being encouraged on lands rendered surplus through implementation of land reform measures. Constraint on State plan resources has, however, been an impeding factor in this programme. There has been some improvement in the position as is evident from the following table:-

TABLE - 5

	At the end of Third Plan	As on 30.6.70
1. No. of societies:		
both Joint Farming and Collective Farming	7,294	8,819
2. Membership	1,87,870	2,41,315
3. Total value of production	Rs. 4.83 crores	Rs. 7.84 crores

SOURCE: Report of the working group on cooperation (Fifth Five Year Plan) Government of India Ministry of Agriculture (Department of Cooperation) New Delhi, 1973.

As a result of these measures taken during Fourth Five Year Plan the number of cooperative Joint Farming & Cooperative Collective Farming societies increased to 4,970 and 4,635 respectively as given below:

TABLE - 6
COOPERATIVE COLLECTIVE FARMING SOCIETIES
1971-72

State/U.Ts.	No. of Societies.	Member-ship.	Area under cultivation (Hectares)	(Amount in Rs.lakhs)	
				No. of Societies in Profit.	No. of Societies in Loss.
Andhra Pradesh	565	29223	18714	53	398
Assam	294	12778	6514	96	117
Gujarat	285	9327	12896	96	123
Haryana	29	2624	1150	2	12
Jammu & Kashmir	20	36	18	-	-
Karnataka	95	4744	5957	27	46
Kerala	4	1364	216	1	2
Madhya Pradesh	1870	26073	26320	758	210
Maharashtra	873	23229	31946	176	318
Manipur	127	7236	1261	28	19
Orissa	4	195	-	2	-
Punjab	57	1688	1314	14	18
Rajasthan	188	4075	1853	5	12
Tamil Nadu	3	137	-	-	-
Tripura	2	374	92	-	-
Uttar Pradesh	125	3600	10596	28	23
West Bengal	106	3862	789	29	34
Arunachal Pradesh	3	89	4	1	2
Goa Daman & Diu	3	65	40	1	1
All India	4635	140719	120740	1317	1335

SOURCE: Cooperative Non-Credit Societies in India Statistical Review of Progress 1971-72, Administrative Intelligence Division (Department of Cooperation) Ministry of Agriculture Government of India.

* Include 818 societies to which no land was allotted.

TABLE - 7
COOPERATIVE JOINT FARMING SOCIETIES
1971-72

State/U. Ts.	No. of Socie- ties.	Member- ship.	Area un- der culti- vation (Hectares)	(Amount in Rs. Lakhs)	
				No. of Socie- ties in Profit.	No. of Societies in Loss.
Andhra Pradesh	209	10386	6937	15	121
Assam	114	4072	2254	29	52
Bihar	339	12350	13000	140	70
Gujrat	28	808	2808	7	17
Haryana	348	6022	16155	103	155
Himachal Pradesh	8	152	377	3	4
Jammu & Kashmir	8	161	254	2	-
Karnataka	597	12034	36134	154	219
Kerala	112	7275	970	24	86
Madhya Pradesh	341	8780	25928	141	76
Maharashtra	306	5821	9721	68	82
Manipur	39	1289	836	15	14
Nagaland	10	213	31	6	1
Orissa	62	1935	773	20	24
Punjab	648	11120	27300	270	216
Rajasthan	328	5147	1935	15	6
Tamil Nadu	14	468	338	-	14
Tripura	1	18	6	-	1
Uttar Pradesh	1296	24219	74420	566	329
West Bengal	204	9135	2902	27	98
U. Ts.	50	1225	2620	12	7
All India	4970	122635	230697	1617	1592

SOURCE: Cooperative Non-Credit Societies in India, Statis-
tical Review of Progress 1971-72, Administrative
Intelligence Division (Department of Cooperation)
Ministry of Agriculture Government of India.

(An analysis of the tables indicate) that out of 4,970 Cooperative Joint Farming Societies as many as 1,592 societies were running in loss during the period under review i.e. (about 32 percent). In case of 3,817 Collective Farming Societies* about 1,335 were working under losses (about 35 percent). It does not mean that the collective farming societies were inefficient. The conditions under which these societies have worked were rather difficult due to delay in land reclamation, poor fertility of land, inadequacy of finances, lack of farming skill among members etc. Inspite of all types of hazards the collective farming societies have made numerical progress but viewed as a whole the majority of cooperative farming societies had a healthy progress from the point of view of increasing agricultural production for which the members, local leadership as well as the concerned agencies of the state governments are equally responsible.

In the Fifth Plan², cooperative development will have

*Out of 4,635 Collective Farming Societies no land was allotted to 818 societies, Hence in my analysis they have not been considered as they are not actively undertaking farming operations.

1. Report of the working group on cooperation (Fifth Five Year Plan) Ministry of Agriculture, Department of Cooperation, New Delhi, 1973.
2. Draft Fifth Five Year Plan, 1974-79, Volume II, Government of India, Planning Commission, New Delhi, p. 78.

four specific objectives. The first objective is to strengthen the network, of agricultural cooperatives (credit, supply, marketing and processing) so as to serve as the principal institutional underpinning for a process of sustained agricultural development. The second objective will be to build up a viable consumer cooperative movement to enable it to function as an important element in a consumer oriented distribution system. The third objective is to make efforts towards the correction of regional imbalances in the level of cooperative development particularly in the sphere of agricultural credit. Finally special efforts will be made towards restructuring and reorienting the cooperatives so as to shift the focus of their activities increasingly in favour of small and marginal farmers and other under privileged section of the people.

It has been decided to try out in certain areas where small and marginal farmers are to benefit and the cooperative system is weak, a new concept of a Farmers Service Society, postulated by the National Commission on Agriculture and developed further by a Study Group. This society, while keeping the cooperative frame substantially intact, would really act as a guided cooperative with its activities focussed mainly on the

economy of the small and marginal farmers and agricultural labourers. It will have professional management generally under the supervision of a commercial bank which will loan the funds required by the Society. It will be necessary to work out this system on an adequate scale and improve it so that the benefits may reach the small and marginal farmers in the various development programmes contemplated in the Fifth Plan. An Expert Group constituted by the Government of India on the cooperative credit structure in the tribal areas have recommended the organisation of large sized credit-cum-marketing societies on the pattern of the Farmers Service Society for these backward areas. As the programmes for scheduled tribes will be substantial in the Fifth Plan, this concept will have to be introduced on a large scale.¹

In the ultimate analysis on cooperative farming in India it is evident that we have not followed a well defined pattern of cooperative farming suitable for the economic and social development of the country. Our cooperative farming societies have also not implemented

1. Draft Fifth Five Year Plan, 1974-79, Volume II, Government of India, Planning Commission, New Delhi, p. 78.

the necessary changes as recommended by various expert committees including the Working Group appointed by the Government of India in 1959. The Third Plan laid emphasis on the development of agro-industries as a means of supplementing the income of cooperative farm workers but no organised programme for the development of cottage and small-scale industries was undertaken upto 1963. Even after 1963 the State Governments did not fully participate in the programme for the development of these industries. No specific finances were made available for the development of rural industries under cooperative farming programme. The development of cooperative farming societies under Annual Plans has been haphazard. The Fourth Plan, however, made specific provisions for establishing the agro-industries but the targets could not be achieved and the impact of cooperative farming on the development of agro-industries as a part of farm business has not achieved the desired goals. The fifth plan envisages the development of industries on Cooperative farms through Government assistance, loan and management subsidy etc. The Khadi & Village Industries Board also plans to develop such industries. This is a redeeming feature which would lay the foundation of the genuine cooperative farming societies and shall develop the agro-industries. In this background the next chapter is devoted to examine the problems and prospects of cooperative farming in Uttar Pradesh.

CHAPTER III

COOPERATIVE FARMING IN UTTAR PRADESH POTENTIALITIES AND PROBLEMS

It has been pointed out in the last chapter that cooperative farming has not made any headway in this country. It has failed to increase agricultural production which is, at the moment, low due to small size of holdings followed by consequent dis-economies and lack of proper application of agricultural inputs as well as inadequacy of farm credit. The absence of agro-industries is further aggravating the miseries of the rural population.

In this chapter I have examined in detail the pattern of cooperative farming in Uttar Pradesh with reference to its suitability in the context of the problems referred to above.

A CASE FOR COOPERATIVE FARMING

A study of the size of holdings reveal that the average size of holdings is 2.2 hectares in India.¹ About 15 per cent of the holdings are quite uneconomic having less than 2½ acres of land. Such a small size

1. Pocket Book of Information of Community Development

...contd

of holdings is too small to maintain a family and a pair of bullocks. Needless to mention that the tiny plots of land are a bottleneck in the utilisation of labour, capital and bullocks' power. The ultimate result of all these is low productivity of land. Under the circumstances, cooperative farming offers a solution of this problem. But what form of cooperative farming can deliver the goods is the crux of the problem? Confusion is created by referring to the examples of U.S.S.R. and Japan as countries of the extremes — one having very large farms and the other collectivising on very small farm units. Likewise reference is made to the collective farming of Russia in contrast to the cooperative farming of India. Truly speaking, India must evolve a pattern of her own for the development of agriculture through cooperative farming. We must not be dazzled either by the bigness or smallness of farms for high yields. It is, therefore, necessary to examine the impact of the size of holding on agricultural production. It would not be out of place to discuss the collective farming of Russia for a better understanding of the impact of size on productivity.

Russia is a Communist country where individual farms have been collectivised on a mass scale. This was undertaken as a State policy without any regard to the senti-
Ministry of Agriculture, Community Development and Coopera-
tion, Government of India, p. 162.

ments of individuals. No wonder, in the days of collectivisation of farms (establishment of Kolkhoses) the production declined partly due to resentment from landlords (Kulaks) against the policy of collectivisation and partly due to the poor farm equipment during the early days of collectivisation. Thus the old data supporting the argument that collective farms were uneconomic and production per acre was low, was generally based on the statistics relating to the early days of collectivisation. The information that collective farms have not delivered the goods has been studied in the light of the comparative figures of production of State farms with that of collective farms of Russia. As a matter of fact the collective farms were less equipped in comparison with the State farms and, therefore, their yields were also comparatively poor. However, the collective farms are now well established forms of agricultural organisation. They are successful from the point of view of agricultural output and increase in employment opportunities as discussed in Chapter IV.

Against this background Japan presents a contrast. She has high record of per acre production on small holdings. This high yield per acre in Japan cannot be taken as argument against large sized farms of Russia, Eastern European or Asian countries. In Japan the conditions are quite different. The Japanese soil,

leaving aside the upland fields is generally more fertile. Japan lies in the temperate zone between the 31st and the 45th parallels and her people can work for longer hours per day than the Indian farmers. The climatic conditions in India reduce our man-hour production. Moreover, Japan receives 120 inches of rainfall per year while India gets less than 50 inches of rainfall in most of the areas. The high yield of Japan may also be attributed to institutional and sociological change brought about by nearly hundred years of economic and industrial development. The industrialisation of Japan has also equipped her agriculture with plant protection device, tools, researches, etc. The farmers are not short of finances like their counterparts in India. Paddy is a most important crop of Japan which is planted and looked after by women. Gradually men folk work in domestic industries and supplement the family income. In India, such conditions do not exist. Women labour is neither gainfully employed on fields nor in cottage industries. Naturally the burden of population is borne by the soil without any technological and institutional change. As the resources are meagre and other facilities like irrigation, use of improved tools and implements, fertilisers etc., are not available to the Indian farmer the production per acre is much lower than in Japan. Moreover, the cooperative

credit is not supplied to the farmer according to his needs. Japan, on the other hand, has also been benefited by the social, political and institutional changes brought about by the changing environment. Japanese nation has always survived amidst adversities. Every Japanese by temperament works hard for his country. While in India we are lethargic and resigned to fate, our agriculture is still 'a gamble in rainfall.'

It is clear from the above that a comparative study of agricultural production of India with that of Russia or of Japan is highly misleading. Our agricultural farms large or small do not enjoy the facilities of either Russia or Japan. No statistical data regarding our yields, can lead us to any definite conclusion if we fail to interpret them in the back-ground of the existing conditions prevailing in our agriculture. For example the following table shows that the output per acre on small holdings is the highest but this does not mean that large sized farms are un-economical.

TABLE 1

Table showing Output on different sizes of Holdings
(Value of Output per acre in rupees)

Size-group (Acre)	Cost According Sample		Survey Sample	
	No. of holdings	Output	No. of Holdings	Output
Below 5	47	313.51	121	333.62
5 to 10	71	300.56	133	280.91
10 to 15	37	253.04	72	255.31
15 to 20	17	236.90	40	252.55
20 and above	21	252.12	31	236.70

SOURCE: Singh, Charan : Joint Farming X-rayed. The problem and its solution, Bharatiya Vidya bhawan, Bombay, p. 42.

The above table shows that in the size group below five acres the yield is highest while in the group 20 acres and above it is the lowest. But to say so will be a hasty conclusion. Our enquiry will be meaningful if we analyse the data in the background of the following information:

- (a) Whether land was fully utilized? If not, how much land remained idle?
- (b) Was it cultivated by the tenant cultivators?
- (c) Were the agricultural inputs fully applied?

- (d) Were the irrigation facilities available?
If so, what was the proportion between irrigated and unirrigated land?
- (e) What was the proportion between fertile and unfertile land?
- (f) How the agricultural operations were supervised and managed?
- (g) Have they provided more employment through the development of cottage and small scale industries?
- (h) Whether small and cottage industries created marketable surpluses?

On the basis of the above enquiry the author noted the following:

It is wrong to base the judgment on the results of relatively small but well equipped private farms as compared with the cooperative farms which do not enjoy similar facilities. The productivity per acre on cooperative farms is low due to certain defects over which the members have no control. Again it is perhaps not taken into account that in large sized holdings there is thinner spread of capital and other inputs per acre. Under such circumstances a study of returns to scale requires the increment of all inputs, i.e., capital as well as land labour and management in the same proportion. But ordinarily we lay emphasis on the size of

land alone in the evaluation of yield from large size holdings irrespective of the other inputs essential for production. Thus it is justifiable to say that large holdings can give better results provided they are supplied with the inputs they need and they have been utilised to their capacity. An economically large farm has many other potentialities which are not found in an un-economic unit. For example, it can provide more employment, create more marketable surpluses, develop agro-based industries and produces better quality of different varieties. The size of an economic unit and its maximum utilization depends on many factors such as type of soil, irrigation facilities, climatic conditions, etc. According to this criterion an economic unit may range from 50 to 200 acres depending upon the circumstances of each case. On such a unit more rational use of manpower and draught animals, application of agricultural inputs combined with managerial efficiency will give much better results. As technology improves (which is not necessarily mechanisation), managerial talents grow and economies are effected. All these combined are bound to increase the production.

Likewise, it is not true to remark that through service cooperatives agricultural production is enhanced

1. Khusro and Agarwal, op.cit., p. 51.

because they provide credit and the agricultural inputs necessary for higher yield. They can help in increasing the production but they cannot altogether solve the problems of small holdings. In a service cooperative, farmers join together. They pool their own money savings and deposits from outside, purchase for themselves as well as for others the wherewithal of agriculture seeds, fertilisers, implements, insecticides, weedicides and make available transport, marketing and warehousing facilities. Nevertheless, it must be realised that these organisations tap up only the money savings of the agricultural society - a resource which is known to be in short supply - and do nothing to tackle the problem of surplus labour a resource which is abundant. The major and lasting improvements in productivity in the agricultural sector are possible only when the surplus man-power is fully utilised. Hence it is doubtful to expect considerable benefits to agriculture by the service cooperatives.¹ The small farmers cannot even make use of the services of a service cooperative society. As a matter of fact in those sub-sector of the agricultural economy where owing to the decay of the tenurial system or an extremely unfavourable land-man ratio, serious

1. Khusro and Agarwal, op. cit., p. 51.

disincentives have become the rule, service cooperative will make little headway. Moreover, the service cooperatives have to recover fully the costs of the services from the users. The capacity of the peasant to pay back the full price of a service depends upon successful harvests. The service cooperatives generally tackle money savings, but not the labour problems which loom large in lowering the yield per acre. Unless they mobilise labour effectively they will occupy a relatively minor place in the scheme of agrarian reforms.

LIMITS OF SIZE:

As mentioned earlier the petty size of land cannot enjoy the economies of scale as it becomes a bottleneck on the full use of labour, capital, bullock power and managerial talents. On a cooperative farm the labour power can be used more rationally. Permanent and semi-permanent improvements through levelling, bunding, drainage, digging of wells, constructions of irrigation channels, etc. could be undertaken. Works like fencing, spraying, may also be undertaken more effectively. Conversion of dry lands into wet lands, of single cropped lands into double cropped lands, resort to intensive cultivation will reflect in the increase of agricultural

production. The draught animals, can be looked after properly and utilised more rationally. With these improvements on land the employment opportunities also increase. There may be temporary set-backs in production due to natural calamities to which agriculture is exposed throughout the world. Again, in the beginning the expenditure increases more than the income realised from produce and balance sheet thus drawn up will reflect poor performance. But this will be a temporary phase which should not discourage the development of big farms. It is further argued that costs on large scale farms will be far greater than what they are on small farms taken together owing to the need of detailed supervision and complicated system of accounting, overhead costs, etc.

Here again all such overhead expense will be offset more than the surpluses which they would create through intensive utilisation of land and rationalisation of labour. This is borne out by the example of U.S.S.R., where small collective farms have been amalgamated to form a big unit. The large area of operation has lowered down the managerial and supervisory expenses. However, in our case, no question of such 'big farms' arise. Our aim is to establish cooperative farms ranging from 50 to

to 200 acres according to the type of soil, climate and other conditions. Thus cooperative farming in India does not intend to enlarge the foundation of the collective farms of Russia and is immune from many of its drawbacks.

On the other hand, by pooling land and bringing all the fragments of a holding together, the wastage of land can be avoided. More land can be made available for cultivation by abolishing the strips of land that had to be left between one fragment and another. With increasing activities like construction of wells, reclamation of land, bunding, fencing, as well as shift to double cropping the employment opportunities can be enlarged. The loss of land through fragmentation is considerable. "As a matter of arithmetical facts, since there are about 40 million holdings in the country and the average degree of fragmentation may not be less than five fragments per holding, the saving in land by abolishing the boundaries between some 200 million fragments cannot be inconsiderable, particularly in a country which rightly complains of an adverse land-man ration."¹

COOPERATIVE FARMING DOES NOT NECESSARILY LEAD TO MECHANISATION:

Cooperative farming does not necessarily mean use of

1. Khusro and Agarwal, op. cit., p. 64.

tractors and other heavy machinery except for major projects like reclamation of land, irrigation facilities etc. The collective farms of Russia use tractors, combines, harvestors, etc., but in Poland horses are still employed for ploughing the land. It is a matter of priority that mechanisation is introduced taking in view the prevailing conditions of a country.

In India mechanisation in agriculture on a nation wide scale is ruled out in the present stage of our economic development but partial mechanisation may be useful in a view to displacing draught animal power without displacing men, or in the reclamation of some types of lands, or to meet the regional shortage of labour or in transportation where the time factor becomes highly important.

AVAILABILITY OF FARM REQUISITES

From the above description it is clear that the basic problem with the farmers is non-availability of inputs and their proper use. Instances are not lacking when the water-lifting pumps, fertilisers, improved seeds, sprayers, etc., are not available, and where they are available the financial difficulties come in the way of small cultivators. If there is no other impediment, the

lack of education and technical knowledge do not permit the farmer to take advantage of the facilities*. Thus for one reason or the other, the inputs are not properly applied and the production reflects low yield per acre. To educate millions of farmers carrying on farming as a mode of life is difficult. It is comparatively easy to demonstrate the usefulness of the application of various inputs if they unite together under a cooperative farming society which provides the necessary finance stores the farm requirements and markets the product to the advantage of the members. The proper and timely use of all these inputs will generate large agricultural surpluses essential for the industrial development of the country.

Thus it is evident that cooperative farming is full of promise to meet our agricultural problems. But this does not mean that service cooperatives should be altogether dispensed with. They have also their scope in the rural economy. The usefulness of cooperative farming can, however, be fully appreciated in the following circumstances.¹

1. They are essential for bringing new land under cultivation. The collective work in clearing forests etc., have obvious advantages. The

1. Summary of discussions at the Cooperative Farming Seminar, ICA, New Delhi, 1962.

* The ICA's Regional Seminar held in Japan, 1974, has

members may continue to cultivate lands jointly after clearing the forests because they are resourceless and cannot work without financial and technical help which are available under cooperative farming.

2. The cooperative farming is useful for rehabilitating certain sections of the community such as displaced persons, ex-military personnel, agricultural labourers, etc. These people usually lack agricultural know-how and do not have farm resources. They are likely to derive moral support from each other by working in groups. The Government also finds it easier to provide technical and financial assistance to organised groups rather than to individuals.
3. In settled areas, the scope for cooperative farming appears to be restricted to farmers who cultivate un-economic holdings and are sub-marginal. These farmers represent a category who have a deficit farm economy and who are not likely to attain a self-supporting farm economy in a reasonable short period of time, even when all the farm services and technical know-how are provided to them through cooperative action. Cooperative land utilisation in their case is an obvious necessity, if they are to remain in farm business.

In view of the above, it is worthwhile to examine in the following paragraphs as to how far cooperative farming can increase agricultural production in Uttar Pradesh.

living and other educational activities as an integral part of their business and development programme (see Report of the Regional Seminar on Cooperative Member Education & Communication Japan, April 1974 ICA New Delhi)

SCOPE IN UTTAR PRADESH:

As regards area Uttar Pradesh is the fourth largest State in India while in terms of population it ranks first. About 16.1 per cent of the country's population lives in this State, which has about 9.1 per cent of the area of the country.¹ The State which had 73.7 million persons in 1961 is estimated to have a population of 883 lakh and a total area of 294 thousands sq. km.² The density of Uttar Pradesh per square kilometre of area was 251 in 1961 which increased to 300 in 1971 against the corresponding All-India density of 134 and 182 respectively. This exhibits a greater pressure of population on land and resources available in the State. In March 1974, the population was likely to touch the figure of 98.7 million. The region-wise proportions of urban population to total population and increase in the urban and rural populations can be read from the following.

TABLE — 22

S.No.	Region	Percentage of urban population to total population.		Percentage increase in 1971 over 1961		TOTAL
		1961	1971	Rural	Urban	
					Q	
1.	Hill	12.1	14.7	19.4	49.6	23.1
2.	Western	17.2	18.3	20.4	29.9	22.0
3.	Central	16.1	17.4	17.6	28.8	19.4
4.	Eastern	7.4	8.2	16.2	30.5	17.3
5.	Bundelkhand	13.6	14.7	21.1	32.4	22.6
	Uttar Pradesh	122.9	14.0	18.2	30.7	19.8

1. Draft Fifth Five Year Plan, U.P. Vol I, Planning Department U.P. May 1973, p.29

With such a segment of the population living within its boundaries, economic development of Uttar Pradesh assumes special significance.

The economy of the State is heavily biased in favour of agriculture which is evident from the fact that 77 per cent of the working population was dependent upon agriculture in 1972-73. The agricultural population has no supplementary means for income. The population engaged in household industries is only 2 per cent as against the average of 5.36 per cent in all India.¹ Thus, high density of population coupled with the dependence of nearly 3/4 of its total population on agriculture, and the very low productivity of land has resulted in a low per capita income in the State. In 1971 the per capita income in U.P. was Rs. 297.35.

The importance of agriculture lies in the fact that agriculture and allied activities contribute 68.1 per cent of the total State's income as against 52.0 per cent in all-India. The contribution of

1. The Techno-Economic Survey of Uttar Pradesh mentions that 2 per cent population is engaged in household enterprises -- For details see: TES of Uttar Pradesh, p. 141 and table 5 while the Census of India 1961 mentions 5.11 per cent.

agriculture and allied sectors comprising cultivation, animal husbandry, forestry and fishery in the total income of the State declined to about 54 per cent in 1972-73 from the level of 61 per cent in 1960-61. The share of State Income from the sector of mining, manufacturing and construction which was about 10 per cent in 1960-61 increased to about 12 per cent in 1972-73.¹ From the point of view of India's economy as a whole and particularly in the context of foodgrain supplies its importance is hidden in the fact that nearly 1/3 of the all-India production of wheat is produced in Uttar Pradesh. The low yield of wheat of Uttar-Pradesh has a depressing effect even on the overall national production of this crop.

In order to stimulate the agricultural economy of the state crores of rupees have been spent on agricultural development during the last 25 years, but in terms of yield per acre the results are not good.² For example, in case of rice, maize, barley, gram, groundnut, cotton and sugarcane per acre yield is

1. Fifth Five Year Plan Uttar Pradesh, Annual Plan, 1974-75, Planning Department, Uttar Pradesh, Lucknow, pp. 1-2.

2. See Appendix I for details of expenditure.

below national average. The production of wheat, jowar, bajra, millet and potato is although higher than the all-India average, it is lower if compared with Punjab and Rajasthan¹. Due to low productivity the per acre net value of agricultural production in Uttar Pradesh comes to Rs. 617.00 which is higher than the all-India level of Rs. 161.00 but in terms of investment in agriculture, irrigation facilities, area under double cropping and climatic advantages over other regions of the country this cannot be said as an index of satisfactory progress. Moreover, in eastern parts of Uttar Pradesh the productivity per acre shows as abrupt deviation with the western districts.

The backwardness of agricultural economy of Uttar Pradesh is indicated by the following facts:

1. Uttar Pradesh has unfavourable land-man ratio. Nearly $\frac{2}{5}$ of the cultivating families appear to be living on a holding of less than 2.5 acres (i.e. less than $\frac{1}{2}$ acre per head if the size of family is taken as five. The agricultural holdings in the State are extremely small and fragmented. There is, therefore, massive under-employment and thin employment in the State specially

1. Techno-Economic Survey of Uttar Pradesh, p. 21. The situation has however changed in case of coarse grains and their productivity has increased.

because the small and marginal cultivators do not have the necessary resources for investment in agricultural and allied activities. The State, in the absence of adequate investments in the earlier Plan, does not have an adequate infrastructure of power, roads, irrigation, marketing and credit, which is necessary to accelerate the pace of economic development.¹

2. There is general inadequacy of capital and resources, i.e., the farmers lack credit, seeds, fertilisers and implements for developing agriculture.

To remove some of these defects steps are being taken to help the cultivators through the cooperative agricultural credit, marketing, multipurpose, large sized and service cooperatives*. Cooperative better farming and tenant farming societies have also been geared into action to help the farmers. Apart from these societies, different types of other societies working in the State are directly or indirectly of great help to the farmers. As a matter of fact a number of different types of societies (cooperative societies) have also contributed towards the welfare of the agriculturists by providing finances to them. The table No. 3 gives an account of their development during 1960-1973.

1. Fifth Five Year Plan Uttar Pradesh, Annual Plan, 1974-75, Planning Department, Uttar Pradesh, Lucknow. p. 10.

* It has been decided to try out in certain areas a new concept of a Farmers Service Society which will have professional management under the supervision of a commercial bank which will loan the funds required by the society (see Draft Fifth Five Year Plan - Planning Commission, New Delhi, p. 78)

TABLE-3

PRIMARY AGRICULTURAL CREDIT SOCIETIES
IN UTTAR PRADESH

S.No.	Year	No. of Socie- ties.	Member- ship.	Loan Granted	Value of Sale	Paid up Capital	Reserve & other funds.	(Amount in Rs. lakhs)	
								Working Capital	Deposits
1.	1960-61	55,131	33.40	3,097.79	60.65	888.52	208.56	3,418.55	120.95
2.	1961-62	54,700	37.97	3,801.98	46.52	1,040.31	231.86	4,168.65	158.68
3.	1962-63	49,617	41.29	4,332.99	86.13	1,161.84	262.29	4,862.05	202.58
4.	1963-64	46,231	45.85	4,818.33	132.97	1,292.31	304.54	5,813.57	247.78
5.	1964-65	39,734	49.88	4,692.57	129.71	1,393.94	362.23	6,297.10	281.50
6.	1965-66	35,188	50.61	4,447.51	142.00	1,488.85	416.41	6,729.29	294.37
7.	1966-67	30,627	51.97	4,282.82	212.89	1,615.26	453.12	7,265.29	331.87
8.	1967-68	27,704	53.03	5,198.91	323.61	1,758.73	431.60	7,810.80	402.44
9.	1968-69	27,102	53.06	5,449.71	331.14	1,926.67	520.47	8,681.56	441.82
10.	1969-70	26,573	53.36	6,295.40	364.08	2,089.79	544.42	9,852.74	475.21
11.	1970-71	25,922	55.27	5,134.21	392.15	2,193.18	579.24	10,539.66	503.55
12.	1971-72	24,559	57.49	5,245.24	483.49	2,360.03	610.66	11,415.31	476.41
13.(Exp.)	1972-73	24,160	66.74	6,646.44	548.87	2,743.39	627.86	14,822.36	401.77

SOURCE: Sahakarita in Uttar Pradesh, 1974, Government of U.P. p.93.

But these societies do not offer a solution to the problems of small holdings and their fragmentary nature. Production has ^{also} its relation with the size of operation. The law of diminishing returns although operates in agriculture earlier than a manufacturing unit but in case of Uttar Pradesh we are not touching the point where production declines due to large operational unit nor cooperative farming aims at enlarging the farm unit to thousands of acres; rather we are on the lower side where dis-economies occur due to small size of uneconomic unit. It is evident from the fact that the average size of household operational holdings in 1953-54 was 1.46 hectares in Uttar Pradesh as compared to 2.46, 3.03, 6.05, 3.15, 4.33 and 3.97 hectares in Mysore, Bombay, Saurashtra, Madhya Bharat and Hyderabad respectively. From such a small holding no economy of scale can be expected. This problem has its multi-dimensional effect on our economy. The cultivator is not only debarred from the advantages of large scale farming but also suffers from financial difficulties and cannot make use of existing irrigation facilities, improved seeds, fertilizers, sprayers, etc.

For the development of small farmers, having holdings between 1 to 3 hectares, a special project,

known as Small Farmers Development Agency (SFDA), was launched in the four districts of Fatehpur, Budaun, Rae Bareilly and Pratapgarh during 1970-71. Assistance to the tune of Rs. 1.5 crores for each agency is provided by the Central Government. The main functions of the agency are to provide financial assistance in the shape of loans primarily through Land Development Banks, other banks, and the existing co-operative structure and to provide incentives in the form of subsidy which is given for minor irrigation programmes, crop loaning, custom service, construction of storage bins and subsidiary occupations, like dairying and poultry-keeping, at the rate of 25 per cent.

The total number of small farmers, identified in these districts comes to 2.22 lakhs. By the end of 1971-72, 2,891 masonry wells, 890 tube-wells were constructed or installed in these districts. The U.P. Agro-Industrial Corporation has established custom service centres within these project areas. The total funds released by the Government of India for these projects work out to Rs. 123 lakhs, against which the expenditure incurred during 1970-71 and 1971-72 was Rs. 102.32 lakhs. A sum of Rs. 144.25 lakhs has been allocated for 1972-73. The proposed outlay for 1973-74 is Rs. 267.04 lakhs.

With the object of bringing about economic improvement in the condition of farmers, having holdings of less than 1.0 hectare and of agricultural labourers, a special scheme, known as 'Marginal Farmers and Agricultural Labourers Development Agency' (MFAL) was launched in 1970-71 in Mathura and Ballia districts. The total number of beneficiaries under the scheme in the two districts comes to about 47,586. The main programmes included in this scheme relate to minor irrigation, crop loaning, provision of custom service and promotion of subsidiary occupations, like dairying and poultry-keeping along with rural works programmes providing employment to agricultural labour.

During the years 1970-71 and 1971-72 about 18 tube-wells and 58 pumping sets were installed and 3 masonry wells were constructed. It is anticipated that 450 tube-wells, 167 pumping sets and 230 masonry wells will be constructed during 1972-73. It is proposed to construct 180 wells and to install 330 tube-wells and 190 pumping sets during 1973-74. Long-term loans are being disbursed through the respective Land Development Banks and medium and short-term loans through cooperative societies. Minor irrigation programmes, custom service and purchase of milch cattle and poultry are subsidised to the extent of 33 per cent of the cost. The total amount sanctioned by the Govern-

ment of India for these schemes during the years 1970-71 and 1971-72 was Rs. 30.40 lakhs against which the expenditure incurred was Rs. 24.47 lakhs only. A sum of Rs. 70.80 lakhs is expected to be utilized during 1972-73. As the scheme is in the initial stage, the expenditure so far has been low.¹

The increasing population of the State has resulted in the reduction of the per capita availability of land, net area sown and foodgrains. The per capita geographical area of the State was 0.40 hectare in 1961 which declined to 0.33 hectare after a decade. The production of foodgrains in the State during 1960-61 was 144.86 lakh tonnes which increased to 194.65 lakh tonnes in 1970-71, an increase of 34.4 per cent, but a proportionate increase in the per capita production of foodgrains was not possible on account of the increase in the population. Hence the per capita production of foodgrains in the State, which during 1960-61 was about 196 kilograms increased barely by 12.2 per cent in 1970-71 when it became 220 kilograms. A similar trend is visible in the per capita net area sown also. Despite an increase of about 1.1 per cent

1. Draft Fifth Five Year Plan Uttar Pradesh, Volume I, Planning Department, Uttar Pradesh, Lucknow, pp.61-62.

in the net area sown between 1960-61 and 1969-70 the per capita net area sown by the rural population came down to 0.23 hectare in 1969-70 from 0.27 hectare during 1960-61.¹

A small farmer is weak: exposed to all difficulties in the procurement of agricultural requisites, availing of transport, ~~storage~~ and other facilities. The net result is low productivity, low income, less marketable surplus and high cost of production. The cooperative farming society can help the farmer not only in getting the advantages of large-scale farming but also in the application of necessary inputs, so necessary for increasing production.

It has been noted that in Uttar Pradesh during the past decade a sum of Rs. 72 crores (about 44 per cent of the total State outlay in agriculture sector) was spent on extending irrigation facilities.² This created an irrigation potential of 118 lakh acres by the State works alone in 1960-61. In addition, potential to the extent of 60 lakh acres was created by private works.³ But against a total potential of 178 lakh

1. Draft Fifth Five Year Plan Uttar Pradesh, Volume I, Planning Department, Uttar Pradesh, Lucknow, p. 36.

2. Techno-Economic Survey of Uttar Pradesh, op, cit., p. 34

3. Ibid., (foot-note No. 1), p. 36.

acres by 1960-61, actual net irrigated area was only 125 lakh acres.¹ leaving a balance of 53 lakh acres unutilised. Even the area irrigated by the Government canals, on which larger sums were spent during the past decade did not register any appreciable increase. The basic infra-structure for the development of agriculture is irrigation and its contribution to the increased agricultural production has been very significant.

Considering the importance of irrigation great emphasis was given to its development during the Fourth Plan by allocating Rs. 90 crores for major and medium irrigation schemes. It is anticipated that about Rs. 158 crores would ^{have} be spent during the Fourth Plan on these schemes. The excess utilisation of funds has been necessitated because of acceleration brought about in the implementation of Rampanga, Gandak and Sarda Sahayak Projects.

The net irrigated area at the beginning of the Fourth Plan in the plains was 65.32 lakh hectares out of total net sown area of 167.89 lakh hectares. During the Fourth Plan period additional irrigation potential of 29.40 lakh hectares is likely to be created against

1. Techno-Economic Survey of Uttar Pradesh, op.cit., p. 36.

a target of 29.91 lakh hectares. Its break up by different sources is as follows:

	<u>Lakh hectares</u>
i). Major and medium irrigation works	4.96
ii). State minor irrigation works	5.90
iii). Private minor irrigation works	<u>18.54</u>
Total	<u>29.40</u>

The utilisation of the additional irrigation potential may be 26.65 lakh hectares. The whole of the utilisation of additional irrigation potential is not expected to add to the net irrigated area, as a part of it, particularly that created by private minor irrigation works, would be utilised to increase the intensity of irrigation in areas which were formerly irrigated by other sources.

The minor irrigation works mainly include State tube wells and minor irrigation lift schemes in the State sector and construction of masonry wells, boring, installation of pumping sets and persian wheels, private tubewells, bundhies, guls, etc. During the first three years of the Fourth Plan 1.05 lakh masonry wells, 58,996 persian wheels, 77,593 pumping sets and 1.53 lakh private tube wells had been installed. By the end of the Fourth Plan the number of these works

was likely to reach 1.58 lakh masonry wells, 94,438 persian wheels, 1.36 lakh pumping sets and 2.63 lakh private tube wells. In the State sector the number of State tube wells had already reached 3,216 in the first four years of the Plan against the target of 1,300 tube wells. The programme for 1973-74 envisages construction of 900 additional tube wells.¹

But the farmers (particularly having uneconomic holdings) have neither incentive, nor means to utilise the existing facilities. They have no incentive because this increases the cost of production which cannot be recovered from the comparatively better yield after irrigating the land from canal water. It has also been noted that in a number of cases there is a great deal of misuse of irrigation water by over irrigating fields. The cultivators do not know the precise quantity of water required by a particular crop. All this shows that the small cultivator inspite of the availability of irrigation facilities cannot make use of the water. Neither of the societies—credit, marketing, better farming and individual farming on cooperative lines—can help the situation. Thus the small

1. Fifth Five Year Plan Uttar Pradesh, Annual Plan 1974-75, Planning Department Uttar Pradesh, Lucknow, p. 3.

cultivator will suffer until he unites together to avail of the existing opportunities.

Likewise the double cropped area can be extended in Uttar Pradesh because of irrigation facilities, fertility of soil in Yamuna-Gangetic Plain and favourable climatic conditions. In 1960-61 the double cropped area was about 26 per cent of the net sown area. The total cropped area is likely to increase from about 224 lakh hectares in 1968-69 to more than 232 lakh hectares in 1973-74, thus stepping up the percentage of double cropped area from about 28 per cent to 34 per cent during the period.¹

This area can be further increased with the help of cooperative farming societies. By suitable changes in the cropping pattern and with the extension of irrigation facilities, it is visualised that the double cropped area can be increased from the present level of 112 lakh acres to 380 lakh acres by 1975-76.⁴ An increase in the double cropping area will also increase the per capita income.

In case of fertilizer and manure the State runs short of supply. The State Government has estimated

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1. Fifth Five Year Plan Uttar Pradesh, Annual Plan 1974-75, Planning department Uttar Pradesh, Lucknow, p.2.
 4. Techno-Economic Survey of Uttar Pradesh, op. cit., p. 34.

that the total quantity of nitrogen required at the end of the Third Plan ~~would be~~ 7.23 lakh tons. The State Third Plan provided for the supply of 4.97 lakh tons of nitrogen in the following manner:¹

1. ORGANIC	(in lakh tons)		
Farm yard manure and compost	2.64		
Night soil compost	0.35		
Green manuring	1.00		
	<u>3.99</u>		
2. CHEMICAL FERTILISER	1.98		
	<u>5.97</u>		
3. CONSUMPTION OF CHEMICAL FERTILIZERS: ⁴			
<u>Fourth Plan:</u>	<u>Nitrogenous</u>	<u>Phosphate</u>	<u>Potassic</u>
a). Assumed base level	2.00	0.50	0.36
b). Targeted level for 1973-74	5.50	2.20	1.60
<u>Actual Achievement:</u>			
c). 1968-69	2.20	0.77	0.42
d). 1969-70	3.06	0.99	0.55
e). 1970-71	2.91	0.75	0.45
f). 1971-72	3.38	0.73	0.53
<u>. Anticipated Achievement.</u>			
g). 1972-73	3.73	0.87	0.52
h). 1973-74	4.21	1.03	0.73

This supply was likely to be only 69 per cent of the actual requirements. The country as a whole has been

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1. Techno-Economic Survey of Uttar Pradesh, op.cit., p. 34.
 4. Fifth Five Year Plan Uttar Pradesh, Annual Plan, 1974-75, Planning Department Uttar Pradesh, Lucknow, p. 26.

experiencing acute shortage of chemical fertilizers. Uttar Pradesh has been experiencing the shortage even more acutely because of the huge demand created during the last few years and inadequate allocations available to the State. The use of N, P_2O_5 & K_2 during the Fourth Plan period reflected a steady progress towards balanced application of chemical fertilizers. The following table shows the comparative figures in respect of chemical fertilizers:¹

TABLE - 4
USE OF CHEMICAL FERTILIZERS

Year	(Lakh Tonnes)		
	N	P_2O_5	K_2
1968-69	2.20	0.77	0.42
1969-70	3.06	0.99	0.55
1970-71	2.91	0.75	0.45
1971-72	3.38	0.73	0.53
1972-73	3.73	0.87	0.52
1973-74 (Anticipated)	4.21	1.03	0.73

But in the interest of productivity it is suicidal to leave any deficits uncovered. In the absence of organised efforts we cannot increase the supply of

1. Fifth Five Year Plan Uttar Pradesh, Annual Plan, 1974-75, Planning Department Uttar Pradesh, Lucknow, p. 14.

manure by individual encouragement to millions of small cultivators. This problem can easily be solved through cooperative farming societies which can take up the work of proper utilisation of farm yard manure and night soil compost. Green manuring can be increased. The use of chemical fertiliser can be reserved for the most important crops. Thus on the one hand, the cooperative farming society has the resources of securing the necessary inputs while on the other hand it can utilise them in a rational way.

One of the methods for achieving quick gains in productivity is the use of improved varieties of seeds. A cultivator farming on a tiny land has less incentive for the use of improved seeds because in case the costly variety of improved seed like Mexican variety is not followed by adequate irrigation facilities the application of fertiliser will damage the crops. But the cultivator of Uttar Pradesh has meagre financial resources. Moreover, the small cultivator does not get loan from the cooperative society, or it is delayed because of defective procedure. Poverty is a curse. The supervisor of a cooperative society, an exploiting agency in the chain of cooperative loaning does not care for the poor

cultivators. The supervisors are now recognised as a new addition in the category of money lenders and exploiters of poor agriculturists. The small cultivator is an easy prey to him.

As a result of all this, the improved seeds are not widely used by small cultivators. In 1965-66 there were in all 1,428 godowns for seed. The quantity of seed distributed during 1965-66 was 9.51 lakh quintals. The target of distribution of certified seed of food crops for the year 1974-75 is 30000.50 tonnes while in case of other crops the target laid down is 6000.50 tonnes.¹ The target for fifth plan is 83000.60 tonnes and 12000.50 tonnes for food crops and others respectively. But a poor farmer cannot afford to purchase it nor it is within his reach to get it. In Uttar Pradesh the cooperative seed stores are functioning since 1946 but they are not in a position to meet the requirements of farmers.

In general, lack of adequate and timely finance at reasonable rates has been one of the main handicaps to the cultivators. The small cultivators are the

1. Fifth Five Year Plan Uttar Pradesh, Annual Plan 1974-75, Planning Department Uttar Pradesh, Lucknow, p. 30.

worst sufferer. If we assume a moderate figure of Rs. 50.00 per acre for short and medium term purpose in Uttar Pradesh, the total annual loan requirement comes to Rs. 268 crores out of which the cooperative societies provided only Rs. 66.46 crores during the year 1972-73. The crop loan system recently introduced to provide loan to the farmers irrespective to their assets and status does not seem to help him more. It has been noted that outstanding cooperative loan against small cultivators is less in comparison to big cultivators. But they gain the least from cooperatives because they cannot invest sufficient money for increasing their share capital which is the basis of providing loan.

Consequently the Fifth Five Year Plan has laid down that special efforts will be made towards restructuring and reorienting the cooperatives so as to shift the focus of their activities increasingly in favour of small and marginal farmers and other under privileged section of the people. The small & marginal farmers still constitute to be at a great disadvantage in many states in the country inspite of the laws providing for an appeal against the refusal of cooperatives to induct such members. It has also been decided to try out a new

concept of a Farmers Service Society.¹

Due to uneconomic holdings, the farmers are unemployed for a part of the year. Not only this but the problem of under-employment is growing due to high pressure of population on land. The secondary sector consisting of mining and industry, where normally the productivity per person engaged is much higher has been relatively backward in this State. The share of State income originating in the industrial sector is only 9 per cent as against the all-India figure of 19 per cent.² In eastern Uttar Pradesh the man-power is under utilised

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1. Draft Fifth Five Year Plan, 1974-79
Vol II, Planning Commission, Government of India, Page 78.
 2. Industrial Programmes in Uttar Pradesh during Fourth Plan, Directorate of Industries, Uttar Pradesh, Kanpur, 1965, Page 3.

in a large measure.¹ Cooperative farming can help this situation also by developing agro-industries and other activities on cooperative farms.

Likewise in the procurement of agricultural implements, insecticides, pesticides, weedicides, sprayer, availing of the godown facilities, marketing, transport and other services the cultivator is the last to take advantage of the facilities provided by the Government and cooperative agency.

In short, the economy of Uttar Pradesh demands an urgent solution of agrarian problems. We cannot be successful in our aims to establish socialist pattern of society, unless we remove the shortcomings given above. To achieve this end Uttar Pradesh has pursued the policy of organising cooperative farming societies by educating the farmers as one of the measures to stimulate the agricultural economy. The progress achieved in organising the cooperative farms is discussed below:

PROGRESS IN UTTAR PRADESH

In Uttar Pradesh a number of non-credit societies were organised on the recommendations of Oakden Committee

1. Techno-Economic Survey of Uttar Pradesh, op.cit., p.209.

but cooperative farming societies could not be developed before 1947. However, a start was made to eradicate the undesirable features of rural life on the recommendations of Oakden Committee and better living and farming societies were started in Uttar Pradesh.¹ But it was only in 1950-51 that the scheme of cooperative farming was taken up as an experimental measure on modern lines. Provision for the organisation of cooperative farming societies was made in the U.P. Zamindari Abolition and Land Reforms Act, 1950 (U.P. Act No. 1 of 1951). A target of 100 cooperative farming societies was fixed for the First Five Year Plan period. This target was achieved well within the Plan period and the number of these societies increased to 216 in 1955-56.

The total membership of farming societies at the end of 1955-56 was 4,590 total area of the land held by these societies 50,962 acres. During the period 1951-56, about 9,000 acres of land lying fallow was brought under cultivation through joint and cooperative efforts. The share capital of cooperative farming societies was also increased from Rs. 2.51 lakh to Rs. 13.30 lakh and working capital from Rs. 8.17 lakh to 39.70 lakh in 1955-56.

1. For details see : Laxmi Narayan and Kanungo, 'Glimpses of Cooperative Farming in India', Asia Publishing House, New Delhi, 1967.

Under the Second Five Year Plan, again a target of organising 100 cooperative farming societies was laid down. The programme had a good response from the people and the number of societies increased to more than 400 societies before the end of Second Plan. But all the societies started during the period were not cooperative farming societies in terms of their definition in the Second Plan. Most of them neither pooled their land nor carried on joint management of cultivation. Societies like 'better farming' and 'tenant farming' were also labelled as cooperative farming societies during this period. Moreover, societies which were under the process of liquidation and sometimes even liquidated were also shown in the records.

The study made by the Agricultural Economics Research Centre, University of Delhi¹ points out that most of the existing cooperative societies in Uttar Pradesh were not genuine and a sizeable proportion of financial assistance given by the Government seems to have been given to societies which could by no means be regarded genuine.¹ With this background the programme of organising cooperative farming societies was started in Uttar Pradesh during Third Plan.

1. For details see : Laxmi Narayan and Kanungo, 'Glimpses of Cooperative Farming in India', Asia Publishing House, New Delhi, 1967.

The Third Plan laid down a target of 1,000 cooperative farming societies-450 in pilot projects, to be started in cooperatively developed Community Development Blocks and 550 in other areas. As Uttar Pradesh is a densely populated State of India, dominated by agricultural activities carried on over small and scattered holdings, therefore, the programme has appealed to the masses. The number of farming societies working in the state on 30th June 1962, was 112. Of these 40% were joint farms and 4% collective farming with a total membership of 1,200; paid up share capital of Rs. 28,50,000 and working capital Rs. 90,25,000. The total land pooled by these societies was 96,000. During the year 1962-63 several measures were taken to accelerate the tempo of progress and the programme of organising cooperative farming societies in pilot projects was successfully carried over during the year. In non-pilot areas too the programme attracted the rural folk. To meet the growing need of funds during the year 1963-64 additional finances were provided for the expansion of cooperative farming, and organising cooperative farming societies on Government waste land, surplus land available after imposition of ceilings on land holdings. During the year 1963-64 the number of societies organised were 165 in pilot projects and 74 in non-pilot projects against

a target of 150 and 50 respectively. The total number of societies during the year increased to 400 and 160 respectively.

The progress of the societies can be read from the following:

TABLE - 5

Year	No. of cooperative welfare societies	Membership
1950-51	40	1320
1951-52	210	4575
1952-53	307	6,111
1953-54	1577	24363
1954-55	1417	20177

SOURCE: Bulletin of Cooperative Movement in U.P. Important Statistics, Government of U.P. Lucknow.

The Uttar Pradesh Government provided financial assistance to these societies on the following pattern without any distinction between pilot and non-pilot societies.

- (a) Cattle shed-cum-godown Rs. 5,000 (75% loan and 25% subsidy).
- (b) Medium term Loan Rs. 4,000 (@ 3½ per annum interest).
- (c) Management expenses Rs. 1,200 (spread over three years).
- (d) Government share Rs. 1,500 (Matching basis).

The State Government participated in the capital of these societies as follows:

TABLE-6

Year	State participation in share capital (₹. in lakhs)
1951-52	0.70
1952-53	3.30
1953-54	7.20
1954-55	11.50
1955-56	12.50
1956-57	12.30

Source: Compiled by the Author.

To create enlightened membership, a number of programmes were organised viz., village camps, cooperative conferences, seminars, tours, etc. The State Advisory Board (cooperative farming) also helped in the task of guiding, advising and reviewing the programme in the State.

In order to ensure that only good and genuine cooperative farming societies are organised the following conditions were required to be fulfilled by every society before it is registered.¹

1. The Cooperative Movement, U.P. Cooperative Department, U.P., Lucknow, 1963. pp. 41, 42.

TABLE-7.

Source of Capital and Finance in the Cooperative Farming Societies in U.P.
(Rs. in thousand)

Years	No. of societies		Share Capital		Statutory and other Reserves		Deposits		Borrowings		Working Capital	
	Joint Farming	Collective	Total	Govt. Contribution					Government	Banks	Others	
1	2	3	4	5	6	7	8	9	10	11		
1950-51	-	40	320	-	25	102	70	65	42	624		
1955-56	-	216	1,385	-	139	1,725	239	272	72	3,832		
1960-61	353	34	2,330	-	601	3 346	480	591	80	7,428		
1961-62	465	45	2,688	98	794	3,459	1,111	826	89	8,967		
1962-63	672	48	3,240	330	817	3,719	2,516	1,530	99	11,921		
1963-64	889	64	3,921	726	904	4,059	4,507	2,207	154	15,762		
1964-65	1,131	86	4,596	1,165	1,198	4,316	5,556	2,851	201	18,799		
1965-66	1,274	85	4,893	1,235	2,121	4,498	5,633	4,783	223	22,151		
1966-67	1,324	93	5,141	1,250	2,216	5,417	6,033	6,290	1,205	26,302		

SOURCE: Records of the Registrar, Cooperative Societies, U.P. Lucknow.

- (i) There must be at least 10 members in every proposed society. All of them should be either Bhumidars or Sirdars. It is, however, desirable to have ~~more~~ members than this prescribed minimum and also to give more encouragement to small landholders for organising cooperative farms. The landless persons may also be admitted as members.
- (ii) A minimum of area ^{prescribed} must be pooled in the cooperative farm. This area is different for different regions as given below:

TABLE - 8

Part area or State	Minimum of land area prescribed	
	For irrigated tracts	For unirrigated tracts
	(Acres)	(Acres)
East U.P., Middle U.P. and Hill districts.	30	50
West U.P. and Bundelkhand	50	75

- =====
- (iii) The members should have raised at least Rs.1500 as their own share capital.
- (iv) There should be joint cultivation and pooling of land.
- (v) Farming societies of persons who are members of single family should not be encouraged.

An encouraging feature of the development of cooperative farming societies is evident from the fact that the farmers possessing small holdings were encouraged to join the societies as it is evident from the following

TABLE 19

Pooling of Land (Percentage) of different sizes
(1965-66)

Less than 3-1/8 acres	...	40%
3-1/8 to 6 1/2 acres	...	26%
6 1/2 to 12 1/2 acres	...	20%
12 1/2 to 25 acres	...	8%
Over 25 acres	...	5%

SOURCE: Cooperative Movement in Uttar Pradesh, (Hindi) 1967.

In 1966-67 about 1,360 cooperative farming societies existed in Uttar Pradesh, having 300 tractors, 200 boring wells, 230 pucca wells, 192 pumping sets and 15 rehats.¹ The scheme of organising cooperative farming societies was also given a push in the newly reclaimed areas. No doubt the initial cost was high but this investment bears a promise for future prosperity. Additional cultivable lands have been brought under cultivation and many improvements for better cultivation in the existing cultivated lands through these societies, e.g., fencing to protect from wild animals. Mend Bands to check outflow and waste of irrigation water, construction of pucca irrigation channels, construction of masonry wells,

1. Uttar Pradesh Sahakarita(Hindi), Department of Cooperation, U.P. Government, 1967 (Cooperative Farming, p.2).

small tube-wells or Bandhies for irrigation, have been constructed. On some farms cottage and small industries have also been developed. But due to poor implementation of the government policy, lack of finances and encouragement by the Cooperative Department, these industries have not developed. *on large scale.*

The Fourth* Plan laid down the target of organising 250 societies at the rate of 50 societies per year. However, in 1966-67 sixty-nine cooperative farming societies were organised. The Plan emphasised on the viability of farming societies. With this end in view intensive programme was taken up in six selected pilot projects. As a part of this programme development of industrial cooperatives on the farms, full use of irrigation facilities, use of high yielding varieties of seeds, fertiliser, green manure, improved agricultural implements and plant protection programme was expected to accelerate.

Financial help was provided to the societies on the pattern of Third Plan with the exception that loan provided for cattle shed and godown amounting to Rs. 5,000.00 was not given. However an amount of Rs.5,000.00 was given for the development of subsidiary industries.

* The Fourth Plan of Uttar Pradesh begin from April 1969. The Three years' period, i.e., 1966-67, 1967-69 & 1968-69, has been divided into three annual plans.

Moreover, an amount to the extent of Rs. 15,000 (@ Rs. 100 per acre) was also provided to these societies as long term loan for land improvement and development.¹ The development of farming societies during the Fourth Plan can be read from the following:

COOPERATIVE FARMING IN
UTTAR PRADESH

S.No.	Year	No. of Societies	Member-shares	Area of Co-op. Farming (in acres)	Paid up Capital	Reserve & other funds	Working capital
1.	1960-61	387	8,511	84,126	23.29	6.01	74.28
2.	1961-62	509	11,002	95,728	26.88	7.93	89.67
3.	1962-63	720	15,727	1,10,828	32.39	8.27	119.31
4.	1963-64	947	29,254	1,31,478	39.12	10.22	158.54
5.	1964-65	1,210	24,383	1,29,788	45.96	11.98	187.99
6.	1965-66	1,359	26,487	77,711	Rec.	17.56	217.72
7.	1966-67	1,417	28,159	80,675	"	22.16	263.02
8.	1967-68	1,388	27,284	68,054	"	28.40	260.64
9.	1968-69	1,383	27,290	69,729	"	46.68	289.82
10.	1969-70	1,411	27,746	84,450	"	56.15	313.24
11.	1970-71	1,416	27,794	97,049	"	54.63	327.62
12.	1971-72	1,421	27,819	97,756	"	63.95	311.61
13.	1972-73 (Expected)	1,429	28,066	98,440	"	64.03	575.98

SOURCE: Shikarita in Uttar Pradesh, 1974, Government of U.P. p. 93.

1. Cooperation, U.P. Department of Cooperation, U.P.(Hindi), (Cooperative Farming), 1957, p.5.

TABLE - 10
COOPERATIVE FARMING SOCIETIES

	Cooperative Joint Farming Societies		Cooperative Collective Farming	
	<u>G.P.</u>	<u>All India</u>	<u>U.P.</u>	<u>All India</u>
1. Number of societies	1296	4970	125	4635 [£]
2. Membership	24219	122635	3600	140719
3. Area commanded (Hec.)	85548	343872	12208	207665
4. Area under cultivation (Hectares)	74420	270069	10596	120740
5. Working Capital	526.75	1369.81	49.14	582.53
6. Government aid loans & subsidies	1.60	64.97	0.06	18.34
7. Loan advanced (St & M.T.)	2.48	45.99	0.36	8.27
8. Value of Production.	231.95	731.91	10.52	200.48
9. Value of Sale	251.06	658.87	14.28	191.41
10. Number of Societies in Profit.	566	1617	28	1317
11. Amount of Profit.	27.77	49.97	0.48	16.37
12. Number of Societies in loss.	329	1592.	23	1335

(Amount in Rs. lakhs)

SOURCE: Cooperative Non-Credit Societies in India, Statistical Review of Progress 1971-72, Administrative Intelligence Division (Department of Cooperation) Ministry of Agriculture Government of India.

£ Includes 818 societies to which no land was allotted.

Under Fourth Plan the cooperative farming society was required to fulfill the following conditions before it is registered:¹

1. There must be at least 15 members of the society - 10 Bhumindars and 5 Sirdars.
2. Majority of the members shall be owner of small land and landless labourers. Absentee members and non-members should be less than one fourth of the total number of members.
3. In case of irrigated land the society should possess at least 50 acres of land while in case of unirrigated area the minimum land should be 100 acres.
4. Capital should be raised in the form of share capital.
5. Land, manpower and other resources should be pooled together and cultivation should be carried on jointly.

These changes have been made for providing a check on future growth of such societies which are not genuine. It ~~was~~ expected that the new financial pattern and conditions for registration will help in promoting genuine cooperative farming societies. *It happened so and* the farming societies increased from 1359 at the end of third plan to 1436 in 1974 as given below:

1. Cooperations U.P. Department of Cooperation U.P. (Hindi) (Cooperative Farming) 1957 p.s

TABLE - 11

	<u>At the end of IIIrd Plan</u>	<u>Position as on 30.6.1974</u>
1. Number of Societies	1,359	1,436
2. Membership	26,487	28,639
3. Area of Land	1,63,000 Acres	69,166 Hec.
4. Share Capital	48.93 Lakh	56.31 Lakh
5. Own Capital	70.14 Lakh	122.22 Lakh
6. Working Capital	2.22 crores	338.55 Lakh

SOURCE: Sahkarita in Uttar Pradesh, 1974,
Government of U.P. p.

These societies were having 409 tractors, 825 tube-wells 242 pucca wells, 364 pumping sets and 177 rahats. The development, employment oriented & agro-based industries as visualized by the planners did not witness any increase. Only a few Milchy animals, small plots of vegetables, small poultry farms were developed on few cooperative farms. A few which may be counted on the tips of the fingers have developed Khandsari, Crushing of sugar cane from their own crusher, bee-keeping dairy farming, piggery etc. It has been noted during my visit to a few farms of Uttar Pradesh that the amount granted for the development of subsidiary occupation has not been utilised properly. The member farmers of cooperative farming societies have also pointed out that the amount of Rs. 5000 granted per society was insufficient

increase the farm income. It is quite logical. For example a pedigree bufallow costs Rs. 2,500 while a pig costs Rs. 500. The amount of Rs. 5,000 is not enough for an average poultry farm. I am, therefore, of the view that every genuine cooperative farming society should be provided Rs. 50,000 to 1,00,000 for the development of industries on such farms.

The Fifth Five Year Plan of Uttar Pradesh envisages establishment of 100 new societies during plan period. It also mentions that 100 old societies will be revitalized during the period. The work of winding up of the societies running on losses will also be taken up during this period. The financial pattern during the plan will be as follows:

Share Capital Rs. 1,500 per society
 Agricultural Production Credit Rs. 4,000 per society
 Loan for Land Development etc @ Rs. 250 per acre
 subject to maximum of Rs. 25,000.
 Loan for agro-based industries Rs. 5,000 per
 society.
 Management subsidy(Total) Rs. 3,000 per society.

No doubt it is an improvement over the strategy followed during fourth plan. It is premature to predict about the results of new strategy followed in connection with the development of cooperative farming and agro-industrial development on these farms. However it can be remarked that at the moment they are not yielding the desired results. They are neither economically viable nor providing better employment opportunities. The defects as pointed out by the Gadgil Committee are relevant for this study. They

are summarised below.¹

GADGIL COMMITTEE:

The Gadgil Committee has classified the Cooperative farming societies of Uttar Pradesh in the following categories:

- I. Societies formed of small and medium farmers, closely bound by ties of kinship and caste.
- II. Societies formed by small and medium farmers belonging to diverse caste and kinship group.
- III. Societies in which the initiative was taken by a dominant group of higher farmers the other members being small farmers or landless workers.
- IV. Societies formed by large landowners in order to defeat tenancy and land ceiling legislation; and
- V. Collective farming societies formed on lands that were formerly un-reclaimed and under forest.

MOTIVATION

The societies of I and II group came into existence because of economic necessity. Members in these societies were motivated by a common desire to improve their agricultural production and living standard by pooling their resources. They found it practicable to do so by joining forces with others who belonged to a similar social and economic status. Societies of III and IV

1. For details see: Report of the Committee of Direction on Cooperative Farming, Ministry of Development & Coop., Government of India, 1965.

group were based on an uneven partnership of big and small farmers and have worked poorly. There was neither loyalty to the society nor desire to make it work efficiently. As regards the members' participation it was poor in all the types of societies.

IMPROVED PRACTICES:

A number of societies have adopted improved practices. The societies of category I have comparatively poor finances and therefore, the improved practices of a wide range have not had a chance on them. The collective farming societies and societies formed by big land-owners stood better in this respect. They were found equipped with tractors and used improved seeds, introduced Japanese method of paddy cultivation, etc. Many of the societies have given high priority to improving their irrigation facilities in spite of financial difficulties and other short-comings. The societies have faced extreme difficulties in obtaining long and medium term loans for land improved. Most of the societies suffer from inadequacy of finances for carrying out the programme.

EMPLOYMENT:

The societies have increased employment opportunities. In category I and II the employment potential-

ties are not generated so much as in the case of IV. However, it can be said that the societies did not face the problem of providing full employment to members. Apart from work in agricultural operations on the farm, new societies of I and II categories undertook subsidiary activities. In the societies of III and IV type the land-man ratio was clearly more favourable for full employment to members. As these societies mostly relied on non-members for day-to-day work on the farm, they did not take up any activities allied to agriculture.

FINANCE:

The societies, in general have suffered from financial difficulties. Generally, societies have received financial assistance according to the pattern formulated by the Government of India and the additional assistance for the various developmental programmes has not been adequate. Even the short-term finance on the basis of production plans was rarely given. The medium and long term loans from cooperative agencies were also inadequate. As such, the societies, had to depend more on their own resources. Where it was not possible to raise these (as in some societies of type I and II) the work has suffered. According to the Gadgil report, in case

of societies of I and II category of small farmers the return for ownership of land was generally restricted to less than 25 per cent of the gross income. In certain cases it was not given at all. A high percentage of the gross income of the societies went as remuneration for work to members. But in case of societies of III and IV category a high percentage of the gross income went to casual workers.

From the above assessment of the Cadgil Committee, main conclusions of which supports the study undertaken by Agricultural Economic Research Centre, University of Delhi, it can be concluded that in Uttar Pradesh genuine cooperative farming societies which fulfill our aim of pooling the small holdings for increasing agriculture, production and strengthening themselves financially have not come into existence on a large number. The societies of big land owners which defeated our aims of cooperative farming have mostly been organised. Such societies are not interested in developing agro-industries or providing labour. They have switched over to the use of machinery. No doubt they are successful but at the cost of our determination to strengthen the development of socialist pattern of society. In Uttar Pradesh the cooperative farming societies can be organised under Zamindari Abolition and Land Reforms Acts but it can be registered by the Registrar, Cooperative Societies. Uttar Pradesh.

A characteristic feature is the use of 'compulsion' in the organisation of a society, which can be exercised under the Zamindari Abolition and Land Reforms Act of Uttar Pradesh.

The societies of small land owners have a definite tendency what may be said as the collectivisation of land on principles quite foreign to "cooperative joint farming." The Gadgil Committee has noticed one society of type II in which no return on land was paid. If such a beginning has been made then Otto Schiller¹ is right in his assessment of a situation when he remarks that nearly all Asian countries are based on agricultural economies.....In their efforts to find a solution for these problems they are naturally influenced by the new social and economic agricultural policies of neighbouring communist countries, an influence which is intensified by systematic propaganda.

1. For details see his article, 'The Significance of Soviet Agrarian System in Asian countries', Royal Institute of International Affairs, London, S.W.I., 1965.

The planners are not yet clear whether cooperative farming has been started as an incentive to small farmers to increase agricultural production by pooling their land and resources on cooperative principles or this will lead to cooperativization of all type of holdings-small and big in due course. In Uttar Pradesh middle group and big farmers have also been encouraged to join the societies. The membership of well-to-do farmers has defeated the basic aim of starting the programme. This fact is not evident from the records because the big cultivators have given a small piece of land for acquiring membership of the society which has enhanced the number of members having small holdings in the official record. Moreover, the Registrar, Cooperative Societies, Uttar Pradesh, has also granted membership of cooperative farming societies to corporate bodies under the powers vested in him,¹ which is a pointer to the fact that the department is not careful about the spirit behind the programme.

1. This fact was revealed by the Assistant Registrar, Cooperative Societies, Bijnor, during his discussion with the author.

The discussion reveals that the cooperative farming societies have been formed indiscriminately in Uttar Pradesh. Most of the cooperative farms working at present do not fit into a sensible definition of cooperative farming. The cooperative farming societies at present suffer from lack of finances and supplies of other farm requisites. In the absence of a clear cut policy regarding the organisation and working of these societies, such societies are at cross roads. They have defeated the aim of increasing production and employment opportunities in order to better the economic condition of small cultivators. Instead, they have activated political parties in the villagers who exploit their political ends through them. The author, therefore, recommends the formation of genuine cooperative farming societies for the economic and social development of Uttar Pradesh. To examine in detail the potentialities of cooperative farming societies and their impact on rural industrialization a case study of farming societies working in Aligarh District¹ has been made in the following pages.

1. The author has visited all the twenty five societies in December 1974. Many of these societies were also studied in 1966-67 when the author was working on the U.G.C's Research Project entitled 'A Critical Study of the Cooperative Farming Societies of Aligarh' in 1967.

COOPERATIVE FARMING IN ALIGARH DISTRICT
A CASE STUDY

Aligarh is a Package District. With a view to increase food production by providing all the agricultural pre-requisites simultaneously this district was selected in Uttar Pradesh for the implementation of Intensive Agricultural District Programme in 1961-62. It is one of the western districts of Uttar Pradesh which lies between 27.5° to 78.7° longitude. Like a saucer it is situated in the plains between the river Ganges and its tributary Jamuna.

The texture of Aligarh soil varies from clay loam to sandy loam, the loamy soils being to the extent of about 50 per cent. From productive point of view these are found to be deficient in their nitrogenous and phosphatic constituents and come under the class of poor to very poor.*

The annual rainfall, based on the average of last eight years, is about 920 mm. About 57.4 per cent of the net cultivated area is irrigated, the main sources of the irrigation being State tube-wells, canals and masonry wells. The drainage system of the entire district is very poor indeed as all the four rivers, viz.,

*This type of soil is generally found in the tehsils of Khair, Iglas, Hathras, Atrauli etc.

Nim, Kali, Sengur and Karvan, instead of taking away rain water, flood large areas almost every year during rainy season.¹ The district is served by 452 kilo metres flat surface and 177 kilo metres non-flat surface road. The total length of the railway tract in the district is 168 kilo metres which comes to less than 10,000 persons per kilo meter.

According to the census of 1971 the population of Aligarh District is 2113479. Out of which, 1148766 are male and 964713 are female. The rural population is about 1734798 persons living in 1714 villages. The density of population in 1961 was 351 per sq.km. which has gone up to 421 in 1971.

Aligarh has made rapid progress in the field of agriculture after the introduction of Package Programme in the district. Due to implementation of I.A.D.P., in Aligarh, this district has been given priority in providing seeds, fertilizers, implements etc. Aligarh has fertile soil conditions with a flat surface. Except for some parts of tehsils Khair, Iglas, Hathras and Atrauli the rest of the soil is quite fertile. The existing land use pattern in the district is as below:

1. Progress Report, Intensive Agricultural District Programme, Aligarh (U.P., India), p. 5.

TABLE — V2

Land Utilisation & Irrigation in Aligarh District

		(Hundred Hectares)	
S.No.	Type of area according to use	1959-60	1969-70
1.	Geographical area(According to village papers).	5,054	5,029.82
2.	Forests	12	9.47
3.	Barren and uncultivable land	417	376.43
4.	Land put to non-agricultural uses including home-steads, grave yards, roads, canals, lakes etc.	289	358.91
5.	Cultivable waste	148	117.93
6.	Permanent pasture and other grass land	4	26.94
7.	Land under miscellaneous tree crops and groves not included in the net area sown	45	50.99
8.	Current fallows	2	85.55
9.	Fallowland other than current fallows	196	97.68
10.	Net area sown	3,941	3,905.92
11.	Net area sown expressed as percentage of net area sown	78	
12.	Area sown more than once	1,383	1,808.22
13.	Area sown more than once expressed as percentage of net area sown	35	
14.	Gross irrigated area	5,324	5,714.14
15.	Net irrigated area	2,138	3,088.83
16.	Gross irrigated area	2,463	3,875.50

SOURCE: Compiled by the author

No doubt radical changes have taken place in the land use pattern since 1901, though the basic pattern has been the same till the introduction of Intensive Agricultural Development Programme (IADP). With the introduction of this programme, there are a number of facilities provided to the farmers. Double-cropping area has ^{also} increased. Use of fertiliser and agricultural machinery has also increased and people are motivated to take up farming. Details of production of major crops are shown in the following table.

TABLE — 13

Estimates of Area & Production of Major
Crops in Aligarh District

Commodities	<u>Area in Hectares</u> 1970-71	<u>Metric Tons</u> 1970-71
1. Rice	15,550	11,358
2. Jowar	4,088	1,223
3. Bajra	1,06,318	1,07,806
4. Maize	75,870	1,07,887
5. Small Millets	N.A.	N.A.
6. Wheat	2,06,029	4,22,155
7. Barley	40,813	69,505
8. Groundnut	7,062	663
9. Castor	1	NIL
10. Sesamum	24	4
11. Rape & Mustard	1,524	117
12. Total Oil Seeds	2,631	1,784
13. Sugar cane	18,919	4,49,429
14. Cotton	11,666	8,693

SOURCE: By courtesy of Project Office IADP, Aligarh.

Since the beginning of IADP in Aligarh, the use of fertilizer has increased. In 1969-71 the distribution of fertilizer was as follows:

TABLE — 14

Distribution of Fertilizers in Aligarh District
During 1969-70 & 1970-71

<u>Distribution in Tonnes</u>			<u>Distribution in Kg.per hect.</u>			
W2	P 205	K 20	W 2	P 205	K 20	TOTAL
(1969-70)						
7421	3013	1323	12.99	5.27	2.32	20.58
(1970-71)						
7128	2206	1173	12.01	3.72	1.98	17.71

SOURCE: District Statistics Officer, Aligarh.

Agriculture provides employment to the majority of population as given below:

TABLE — 15

Distribution of Population, both Rural and Urban,
as also Population of total Workers and Workers
employed in Agriculture in Aligarh
District During the year 1971

Total Population	Urban	Rural	% to Rural al to the urban population	Total Workers	Workers employed in Agriculture.
2113747	373094	1740653	82.3	595596	397523*

* Cultivators = 287130 & Labourers = 110393

The average size of holding is small as is evident from the following table.

TABLE — 16⁵

Size of Holding in Aligarh District

Holdings	Number of persons
Below 1 acre	72,172
1 - 5	91,728
5 - 10	63,846
10 - 15	36,961
15 - 20	16,470
20 - 25	6,211
25 - 50	3,480
50 - 100	1,883
Above 100	30

SOURCE: District Statistics Office, Aligarh.

The work of consolidation of holdings, started in 1958, has been completed in the district. With the consolidation of holdings, there is a greater eagerness among farmers to construct surface wells for irrigation. As a result of it the construction of masonry wells, construction of private tube-wells, repair of broken wells, installation of persian wheels, boring of wells, fitting of pumping sets, etc., was undertaken. The loans were provided under the Grow More Food Programme and National Extension Service for increasing agricultural production, and it had its, favourable effect on production.

The net area covered by irrigation through different sources in the district in 1970-71 was as follows:

Canals	1,00,840 hectares
Tube-wells	1,33,972 hectares
Other wells	72,201 hectares
Lakes, Tanks & Ponds	307 hectares
Other sources	1,563 hectares
Net irrigated area	2,08,883 hectares
Area Irrigated more than once	78,667 hectares

The total area under government irrigation command is 2.76 sq. lakh hectares out of which 1.76 sq. lakh hectares is under canal command and remaining 1.0 sq. lakh hectares is under the command of government tube-wells. Remaining 1.34 sq. lakh hectares are irrigated by private sources. About 0.78 sq. lakh hectares are irrigated by persian wheel and private tube wells and other sources. 0.56 sq. lakh hectares have no irrigation facility and farmers are at the mercy of monsoons.*

A detailed programme for the development of irrigation facilities in Aligarh district has been drawn up. According to it, it is expected that during the next 15 years, about 31,269 hectares of additional land will be irrigated after the completion of Ram Ganga and Tehri Bandh Schemes.

*Quoted from the cyclosyled manuscript of the Irrigation Department U.P. Aligarh.

Under the Ram Ganga Scheme new construction to the tune of 71 km. was expected by the end of 1974 for irrigating 11,867 hectares of land. Under Thehri Bandh scheme, 100 km. construction has been proposed. It will irrigate 19,402 hectares of land after its completion by 1980. It has also been planned to construct 168 new state tube-wells during V & VI Plans.

At present* there are 59 multi-purpose societies, 19 non-agricultural credit societies, 460 service co-operatives, 24 cooperative joint farming societies, 40 milk marketing unions, 40 seed stores, 7 marketing societies, 47 block development unions working in the district.¹

The District Cooperative Bank Aligarh is the central banking organisation of the district. Due to its inefficient management, frequent changes in administration and poor recovery of loans, this bank is not serving its purpose. It will be in the interest of the cooperative movement of this district to streamline its management without delay.

* 30th June, 1974

1. See Appendix J

2. See Appendix

The cooperative farming was introduced in Aligarh district after the registration of Shri Nagar Cooperative Joint Farming Society on February 12, 1960. Later on three Cooperative Joint Farming Societies in 1962, eight in 1963, three in 1964 four in 1965, three in 1966, one in 1973, one in 1974 and the last society was re-registered on January 16, 1975. In 1966-67 the position of these societies was as follows:

(a) Societies actually Working and doing Joint Cultivation:

Lakhupura, Shokhna, Jafarabad, N.K.East, N.K.West, Kalora P.Pur, Kawalgarh, Bahanpur, Shri Nagar, Mahasinghpur, Barter Khas, Gangapur, Dholpur Cooperative Joint Farming Societies.

(b) Societies which are Dormant and have not Started Working on Joint Farming Lines:

Lakhupura, Shokhna, Jafarabad, N.K.East, N.K.West, Kalora Uttari, Badola Hazi and Mirga Mai Cooperative Joint Farming Societies.

(c) Societies which are Defunct or have Stopped Functioning and are Under Reorganisation:

Nagla Sukha and Bhojnagar Cooperative Joint Farming Societies.

In 1967 the number of societies under category (a) were reduced from 8 to 5, under category (b) were increased from 8 to 9 and under category (c) increased from 2 to 8.

In 1974* out of 24 cooperative joint farming societies only 15 were actually working, four were dormant and six were defunct. Three societies are located in different tehsils of the district and have small membership which ranges from 50 to 100 members. Both owners and landless workers are participating in the farming activities but the number of members owning land is 298 against 82 members who do not own land. This is of course, not a healthy sign as it encourages absentee landlordism the evil of the past on the basis of which Zamindari system was abolished. The reasons for enlisting landless persons as member vary from society to society.¹ Examples are not lacking when members were recruited to fulfil the requirements of the registration of society, to get patronage of persons having political influence which helps them in taking loan from Government and District Cooperative Bank, to enlist cooperation of persons of high social and economic status in the village like money lenders and traders² etc. The membership of such persons instead of helping the movement retarded its pace on account of the vested interests of their profession as money lenders and merchants. It has been noted that prosperous landless members have not worked as farm labourers which created classes amongst the members.

* 30th June, 1974.

1. The big land lords have acquired membership by pooling a small part of their land with other members of the Society. The money-lenders-cum-farmers are also member, only a few have pooled their total holdings and they may be called genuine members.
2. In Lehra society one of the members was an influential

The farming societies are working on the land pooled by their members. According to the government's direction members were required to pool all their land located within the area of operation of the society for acquiring membership of the society. But the field staff has failed in carrying out the policies chalked out for the organisation of societies because they were helpless and could not go against the wishes of the village leaders and influential persons. The field staff has failed to bring the relevant information to the knowledge of higher officials. As a result persons having big holdings acquired membership of these societies by pooling only a small piece of their land with others and keeping the major portion of fertile land separately. In this manner they enjoyed the best of both the world and evaded the spirit of law. Needless to mention that the Cooperative Societies Act and the byelaws of the cooperative farming societies should be suitably amended to check this evasion otherwise these societies would show poor results and ultimately the common man would discard them for all times to come.

and money lender. This society failed to pay the overdues of the District Cooperative Bank, Aligarh, In 1966 notice was issued against this society and with great difficulty the overdues were realized in 1966-67. Likewise the President of the Bhoj Nagar Society is an influential person of the village. His son is Secretary of the same Society although he is a Govt. Servant and working as group I, in Planning Deptt. Aligarh. This society has also not yet paid dues of the District Cooperative Bank amounting to Rs.1,900.00.

The size of the cooperative farm is neither big nor uneconomic in Aligarh district. The records of the societies show that mostly the members are from the lowest group of holdings. In case of Kapassya Joint Farming Society which came into existence in 1974 the members are rich land lord and have formed this society to dodge the government. Out of the total membership of 380 in 24 societies of Aligarh district the distribution of members according to size of holdings is as follows.*

168 members	3½ acres or less
112 members	3 1/8 to 6¼ acres
90 members	12½ to 25 acres
11 members	25 to 50 acres

The above classification of members according to the land pooled shows that majority of the members are small farmers. However, it is not a fact. The members have deliberately not pooled their entire holdings. They have as stated above preferred to pool a small part of their total holdings which has increased the number of members of the lowest size group of holdings. This is not conducive from the point of view of the principles of cooperative farming which aims at providing an organisation for the economic development of those who have uneconomic holdings. The number of members having economic holdings is quite large** Their participation should not be

* Generally big farmers have contributed a small piece of land for pooling together to acquire membership of the society. Some of them have pooled more than 12½ acres

**According to the estimates prepared by me after my discussion with the office bearers of the societies and supervisors of cooperative farming societies the number of members having economic holdings ranges between 190 to 225.

encouraged in these societies. It would be better to keep them away from the movement because their mal-practices are frustrating the honest members.

FINANCIAL HELP:

The government has provided financial help to the societies by contributing towards their share capital and providing loan and subsidies on the pattern discussed earlier. Upto 1967 the total loan and subsidy given to the 22 cooperative farming societies in existence at that time amounted to Rs. 1,50,100 out of which an amount of Rs. 61,048 was utilised by 31st March 1967. Due to slow progress in the work of societies an amount of Rs. 48,652 was not utilised by March 1967. The District Cooperative Bank Aligarh also provided short term loan to these societies to the tune of Rs. 42,049.00 during 1965-66 and Rs. 37,345.00 in 1966-67. During 1973-74 an amount of Rs. 25,781 was advanced by the District Cooperative Bank, and an amount of Rs. 7,092 was over due for the period 1972-73. Out of this total amount of Rs. 32,873 an amount of Rs. 11,000 was recovered from the societies. The loan outstanding against these societies on June 30, 1974 was Rs. 21,173.

The study, however, reveals that the cooperative farming societies of Aligarh have not received loan

from the Land Development Bank. For taking long term loan from the Land Development Bank, it is necessary to authorise one person to undergo the formalities of mortgaging land of the society for obtaining loan from the Bank. As the members have their own individual holdings and have little stake in the society, they were not interested in taking loan by mortgaging land of the society. Also the members have not shown keenness to mortgage the land of the society and authorise one person for taking loan on their behalf partly due to the lack of confidence in the person so chosen.

The study also points out that the Agro-Industries Corporation, Commercial Banks and other financing institutions have not advanced loans to these societies. The U.P. Khadi and Village Industries Board has advanced loan to a member of the Maho Cooperative Joint Farming Society, Hathras who belongs to Schedule Caste. Although the work is carried out on the premises of the cooperative farm but it is not a part of the activities of the society. The financial position of these societies can be read from the following statement of these societies for the year 1973-74.

Working Capital	Rs. 275027
Share Capital	Rs. 38635.
Governments Participation in Share Capital	Rs. 11700

..contd

Reserve Fund	Rs. 5708
Other Funds	Rs. 11536
Loan taken from District Cooperative Bank (1973-74)	Rs. 25781
Loan Outstanding*	Rs. 21173

The above table reveals that these societies are not financially sound which is further confirmed from the fact that during 1973-74 their net profit amounted to Rs. 7045.

It was expected that the development of cooperative Joint Farming will develop the agro-industries but no such industry has developed on these farms. About 80 buffaloes and a few other milchy animals have been purchased by these societies. The Poultry Farm was started by the Kalera Joint Farming Societies but it was closed after an unsuccessful experiment. Piggery, Poultry, Bee-Keeping, Khandsari etc., has also been neglected. In short, there is no impact of cooperative farming on rural industrial development of Aligarh.

MANAGEMENT:

Good management ensures good results and makes the organisation economically viable. In the cooperative societies it has been noted that many adverse results

* Including the overdues for the year 1972-73.

could have been mitigated through sound management. The general body is the supreme authority. For carrying out the policy laid down in the annual general meeting of the society, a board consisting of five to seven members is elected. From the working of these societies it appears that they have been organised without creating enlightened membership. Consequently, the management is ineffective and least interested in developing the society as a viable unit.

GOVERNMENT OFFICIALS:

To supervise and guide the cooperative farming societies of the district one Senior Farming Inspector, two Supervisors and one V.L.W. Farming is working in the district. The government spends about Rs. 2050 per month on their salary and Rs. 230 per month on other allowances. With this expenditure on staff and financial assistance provided under the programme the net profit earned by these societies during 1973-74 amounted to Rs. 7,045, I, therefore recommend that the government should appoint a committee to examine the question of cooperative farming in the light of experience gained so far.

The above discussion reveals that the cooperative farming societies were organised in Aligarh as well as other parts of U.P. in a haphazard manner. Their number was shown to publicise the achievements of the targets

laid down by the Government for registering the societies. They hardly created any atmosphere congenial for the development of the movement. Examples are not lacking when the field staff gave vaseless assurances to the farmers in order to bring them in the field of cooperative farming. Thus the purpose of cooperative farming was defeated which aimed at providing economies of scale to farmers, haveing uneconomic holdings. The landless members, belonging to political parties, money lenders and traders who are also engaged in farming have nut numbered the small farmers having uneconomic unit. Such members are exploiting the movement and frustrating the small land holders.

The genuine cooperative farming societies have suffered from lack of finances. No doubt instances are not lacking where the finances provided under the scheme for the societies could not be utilised and the amount was refunded to the Government as unspent but the contrary a number of societies have not been provided loan for the development of agro-industries during 1972-74. There are a number of societies that have not paid their dues to the District Cooperative Bank which has in turn adversely effected the finances of District Cooperative Bank. The profits of the societies are meagre and thus reserve funds created by them are also insignificant. Consequently they have not been able to develop for making agriculture a whole-time profession. But this does not mean that cooperative

farming has no future in India. What we need today is a dispassionate study of our problems in the field of cooperative farming and their solution in an effective manner.

In many other countries of the world the cooperative farming societies have a successful career of developing agriculture & agro-industries which has helped them in developing their economy. For a better understanding of the development of cooperative farming in other countries and circumstances which led them to success, the next chapter deals with Cooperative Farming in Foreign Countries.

CHAPTER IV

COOPERATIVE FARMING IN FOREIGN COUNTRIES

In the previous chapter it has been concluded that we need a dispassionate study of our problems in the field of cooperative farming in search of an effective solution to our problems. In this connection, this chapter examines in detail the development of cooperative farming in other countries of the world like USSR, Czechoslovakia, Poland, China, Israel, Uganda, Syria, Nigeria and Iraq and examines the circumstances under which they have succeeded in the field of cooperative farming.

COOPERATIVE FARMING IN U.S.S.R*

Kolkhozes (Collective Farms) are the product of the new economic system which outline the historical development of Soviet Power after the October 1917 Revolution. They have unique features, befitting the economy of the country which aims at achieving communism on the marxist Leninist principles in the shortest period of time. To understand their development, salient features and the role played by them from time to time in the economic uplift programme of the Soviet State, it is necessary to study their origin, development and the conditions under which they are working.

RUSSIA IN TSARIST PERIOD:

Before the revolution, the economy of Russia was based on agriculture. Although agriculture occupied an important place, it was poorly equipped. Out of 20 million peasants, 65 per cent were extremely poor, 20 per cent were average and 15 per cent were well-to-do farmers popularly known as kulaks.¹ There were about 30,000 feudal estates managed by these kulaks. "The principal implements

1. Kulaks is the name given to landlords who were farming with the help of peasants working under them on different terms and conditions.

* The author has visited about 15 Kolkhozes in USSR, 10 cooperative farms in Poland, 5 cooperative farms in Czechoslovakia and 3 in GDR in 1966. A detailed study of these farms has been made by the author and most of the information given about the cooperative farming system of these countries is based on personal observations and notes prepared during the course of discussion with the office bearers of various farms in these countries.

for tilling the soil in Tsarist Russia were primitive wooden ploughs and harrows. According to the census taken in 1910 there were in the country 10 million wooden ploughs, 17.7 million wooden harrows and only 4.2 million iron ploughs. Mechanical movers accounted for only 0.8 per cent. Traction was almost exclusively provided by horses and bullocks.¹ A number of peasants were without implements. For example, 30 per cent farmers were working in the fields without horses, 34 per cent peasants were having no agricultural implements and 15 per cent peasants were not in a position to till their land and raise crops on it as they were having neither horses nor implements and financial resources to make use of the land. The number of cows per household was 0.8 in 1866. Moreover, the land was distributed most unevenly and consequently the kulaks and feudal lords possessed greater part of the land as is evident from the figures given in the following table.

TABLE — 1
DISTRIBUTION OF LAND IN SOVIET UNION

Landowners	(Position at the end of 19th Century)			
	No. of household (families) in millions	No. of Disitin* in millions	Area per household in Disitin.	Average Area per household in acre (approximately)
Ruined peasantry	10.5	75.0	7.0	18.9
Average peasantry	1.0	15.0	15.0	40.5
Kulaks	1.5	70.0	46.7	126.1
Feudals	0.03	70.0	2,333.0	6,299.1

* An old measurement of land used in Tsarist Russia which is less than a hectare.

1. Abramov V. : The Economics of Agriculture, ..contd

In 1913 (before the revolution) 82 per cent of the total population of Russia (165.7 million) was classified as rural and about 90 per cent of the total population was engaged in agriculture. The electricity consumed per hour was only 1.9 million kilowatts during the same year.

From the above it may be concluded that the agricultural economy of Russia was a bourgeois economy and few persons who may be counted on the tips of fingers were dominating the rural economy of the country. Although the number of cooperative societies increased from year to year to finance agriculture they also proved ineffective in solving the problems of the poor peasants.

TABLE - 2
NUMBER OF AGRICULTURAL COOPERATIVES AS ON 1.1.1917

(Figures elaborated by Lenin)

Type of cooperative	No. of societies
Credit and thrift societies	16,135
Agricultural associations	2,500
Butter making artels	3,000
Agricultural societies	6,000
Total	27,685

Source :- Progress Publishers, Moscow, p. 67

The cooperatives were mostly controlled by the rich farmers and consequently they were in a privileged position in using the cooperatives to their benefit. For example, the major part of the loan was advanced to rich peasants and the major part of the profit was also distributed among the rich peasant members of the society. Moreover, the societies were providing more marketing facilities to the rich farmers.

TABLE-3
MARKETING OF BREAD THROUGH AGRICULTURAL
COOPERATIVES

Year	Bread purchased by agricultural cooperatives from big land-lords		Bread purchased by agricultural cooperatives for sale from small peasants	
	thousand puds	percentage	thousand puds	percentage
1906	361	64.3	200	35.7
1907	448	61.5	280	38.5
1908	307	72.7	115	27.3
1909	189	45.5	226	54.5

1 pud—16 kilogram.

The result was that the poor peasantry was not much interested in the cooperative organisations. During the year 1915 one out of 11,000 persons was a member of a society while during the same year in Germany one out of 3,500 persons was enrolled as a member of a cooperative society. Because of poor finances the pre-revolution

production of foodgrains was five milliard puds in which the share of landlords, kulaks and middle and poor peasants was 0.6 milliard puds, 1.9 milliard puds and 2.5 milliard puds respectively. .

After the 1906 land reforms, popularly known as Stolipin reforms, the poor farmers were given some land but due to their poverty, they sold it to the rich farmers in due course of time. This helped the rich peasantry in enlarging their estate. There was no significant change in the employment position of the rural masses. They were, as usual, working under their 'masters', the rich landlords, and kulaks on unfavourable terms and conditions. The land associations which came into existence after the 1861 reforms were also working in Tsarist Russia. These land associations, the earliest forms of land communes, slowed down the development of capitalism in Russia. However, the movement of population from rural to urban areas increased in search of jobs in the newly developing factories during the last years of Tsarism, which gives an indication of the growth of capitalism in the country¹.

1. Quoted from Sami Uddin; Cooperative Collective Farms (Kolkhozes) in Economy of USSR, Khadi Gram Odyog, Bombay, November 1966, pp. 193-195.

AFTER REVOLUTION:

The immediate task before the Bolshevik was to reconstruct the economy of the country on socialist principles. One of the first decrees that the new Soviet Government passed right after the October 1917 Revolution was the Decree on Land¹ whereby all landed ownership was abolished without compensation, all estates, including those belonging to the churches and monasteries, being confiscated with all their properties, buildings and animals and turned over to the custody of what were known as the Land Committees and to the Soviets of Peasant Deputies.¹

Provisionally operate in the matter of land reform was a document known as the Peasant Mandate, which expressed the will of the majority of Russia's peasants. In accordance with this act the right of private ownership to the land was abolished for all times to come; all the land was nationalised and put to the use of those who worked it; all citizens were entitled to the use of the land provided they wish to work it with the assistance of their families, or in association with others;

1. The decree on land was adopted on the second day after the victory of the socialist revolution. The victory of the revolution was declared on 25th Oct. 1919 (according to new calendar the date is 7th November 1917). It was based on the mandate of peasants and therefore, inspite of disagreement on the broader issues, the decree was announced by Lenin in the

the land was apportioned out among the peasants in accordance with a definite labour or consumer, quota; all land was to be subject to periodical reallocation, depending on the natural growth and advances in labour productivity and scientific farming methods; and, finally, the best farms, various nurseries and the like, were not to be broken up but to be kept as model state or rural community farms.

A little later, in February 1918, a new law was enacted on socialisation of the land, whereby the right to the use of land for purposes of farming was granted to agricultural communes and associations, rural communities, families and individual farmers, stressing, however, the need to encourage collective farming in every possible way.¹

As a result of it the peasants received² more than 150 million hectares of former landed, imperial and monasterial estates, along with another 80 million-odd hectares of kulak farms, and were likewise absolved of land rents totalling 700 million gold roubles,

expectation that in due course of time the Bolshevik will be able to make adjustments later on.

1. N.Mymrikov, *The Prosperous Collective Farm*, Navosti Press Agency Publishing House, Moscow, 1973 pp. 5-6.

2. Ibid, p. 7.

per annum, besides other debts adding up to the astronomical figure of 1,500 million roubles. Describing the significance of these initial laws, Lenin wrote: "In this peasant country it was the peasantry as a whole who were the first to gain, who gained most, and gained immediately from the dictatorship of the proletariat."¹ To consolidate the working of different types of societies and check concentration of people who were hostile to soviet power a decree was issued on 21 January 1920 for amalgamation of different types of cooperatives into a common system. Lenin considered it a simple, accessible, easy and economically acceptable way for the peasant to free himself from exploitation and poverty and draw within the orbit of socialist and communist construction. The cooperation plan provided for the peasants step by step involvement in collective farming, initially through a system of crediting, marketing and supply arrangements, and, subsequently, by their voluntarily banding together in producers' cooperatives, coupled with extensive state subsidies and material supplies. This idea at once caught on among the peasants, who set up along with consumer co-ops, sundry primary producers' societies for the processing of crude materials and the marketing of farm produce,

1. See Lenin's Collected Works, Vol. 30, p. 112.

and specialised grain, cotton-growing or dairy cooperatives.¹

Later on the decree of the Central Committee of the Soviet Union dated 16 August 1921 on agricultural cooperation singled out the agricultural cooperatives from the cooperative system of the country. This gave a new status to the agricultural cooperatives and the number of societies increased rapidly - from 12,000 in 1920 to 24,000 the following year.² It rose to 31,187 in 1923. The progress of all types of the cooperatives from 1924 to 1927 is given below:

TABLE-4
PROGRESS OF ALL TYPES OF COOPERATIVES
IN SOVIET UNION 1924-1927

Date	No. of local cooperatives	Percentage of rate of growth	No. of cooperative members in thousands	Percentage of rate of growth
1-10-1924	32,895	100.0	2,719.2	100.0
1-10-1925	35,000	106.0	5,361.1	197.2
1-10-1926	48,134	146.3	6,905.6	253.9
1-10-1927	64,573	196.3	9,468.2	348.2

Out of 64,573 local cooperatives 47,667 were producers cooperatives and about three per cent of the

1. The Prosperous Collective Farm, Novosti Press Agency Publishing House, Moscow, 1973, p.9

2. USSR in Figures, Central Statistical Board, USSR.

local agricultural cooperatives were cooperative collective farms. As the growth of producers associations was also rapid, unions were organised by the agricultural cooperatives to combine different activities, viz., marketing, supply and production. A detailed account of the production associations can be read as follows:

TABLE - 5
PRODUCTION ASSOCIATIONS IN SOVIET UNION
1926-27

	1-10-1926	1-10-1927	Percentage of growth
Land Reclamation Association	5,979	6,098	102.0
Machine and Machine Tractor Associations	9,469	13,767	145.4
Cattle Breeding Control Association (for checking cattle breed etc.)	2,337	3,663	132.1
Seed Association	1,227	2,129	173.5
Sowing Association	659	1,723	261.3
Collective Farms	17,147	20,881	121.8
TOTAL	36,818	47,667	129.5

In short, "by the end of 1927 Soviet agricultural cooperatives united over 10,000,000 peasant farms. Some 80,000 local agricultural cooperatives, over

400 cooperative unions and 28 specialized national cooperative centres were functioning in the country. Cooperatives had 16,000 enterprises for the processing of farm produce (butter and cheese factories, flour mills, etc.), about 12,000 grain cleaning and machine repairing enterprises, nurseries and other establishments. Typical of that time was the gradual transition from sales and supply cooperatives to producers cooperatives, the development of simple forms of produce associations into collective farms (kolkhozes)¹. The beginning of the collective farms as an association for the joint cultivation of land is quite old.

Before wholesale collectivization started, there were three main categories of agricultural producers' cooperatives: the TOZ - the association for the joint tillage of the land; the agricultural artel; and the commune.

The TOZ was the simplest of the three. Though the land was farmed in common, draught animals and implements remained in the private possession of TOZ members, who contributed them to common pool only for common work on the fields. Meanwhile the income derived was apportioned out in accordance with the amount of work done and the share contributed to the

1. E. Abramov, *The Economics of Agriculture*, Progress Publications, Moscow, p. 67

common pool. The extent to which the peasant used his own means of production in the common effort, determined the share he received from the common funds. Even, though this was a very simple form of association, it enabled the peasant to learn the rudiments of common management and see for himself from his own experience the advantages to be derived from collective efforts. But since the TOZ could not provide for the basic solution of the socialist reorganisation of agriculture, by socialisation of the means of production which meant their transfer from private hands common ownership, it could not lead to collectivisation proper. Consequently these associations were reorganised into what was known as the agricultural artel.

A special form of cooperative, which in its day greatly facilitated collectivisation, was the agricultural commune. The communes, in which every thing was socialised down to a member's own household, and in which everything was apportioned out equally, displayed great pluck in the struggle against the enemies of Soviet Power and especially against the kulaks, and scored some success in the remaking of rural social life. However, the production levels reached were still too low to adequately satisfy the needs of the members from the commonly owned economy, and, further, the

insufficient account taken of the peasant's own personal interests impeded the development of socialised production. As equal apportionment ran counter to the basic principle of socialism, the correct and proper combining of social and private interests, this grave blunder on the part of the first communes did not allow them to set the pattern for collectivisation.

Practice demonstrated the superiority of the agricultural artel as the most apt type of producers cooperation in the countryside. Its Model Rules, approved back in 1919, stated that the artel's basic objective was the replacement of the outlived form of private farming with farming based on sound comradesly relations by the introduction of a collective effort which could be more efficient, serve to deliver the peasantry from want, and raise their material and cultural levels. Its advantage over all other forms of association was that it successfully coupled social with private interests. Remuneration accorded with the amount and quality of the work contributed by each member to the collective effort. Alongside the commonly-owned lands and main means of production, there was also the private husbandry; including the plot and domestic cattle and poultry, that remained the artel member's

own personal possession.¹ The peasantry preferred the artel as the guideline in mass collectivisation.

Out of the TOZ (association for the joint tillage of the land), the commune, and the agricultural artel, preference was given to the last category during mass collectivisation, particularly since it provided the right solution with respect to the apportionment of the material values produced. The TOZ remunerated its members not only according to the share of work contributed but also according to the share contributed to common kitty; the commune apportioned everything out equally, regardless of how much had been done by the different members; the artel kept to the principle of payment for the actual work done. No doubt different ways were explored and sundry errors made before an equitable form known as the work day unit was finally evolved.

During the First Plan of Soviet State 1928-33 as well as in the succeeding plans the state has provided liberal finances for the development of agriculture (collective and state farms).

The investment of state in agriculture can be read as follows.²

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1. N.Mymrokov, The prosperous collection, Progress Publications, Moscow, pp. 13-15.
 2. For details see National Economy of the Year 1959, 23rd Congress Report of CPSU, Moscow and the IX Economic Plan of USSR.

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TABLE - 6

<u>Year</u>		<u>Million Rubles</u>
1910-1928	100
1929-1932	12,000
1933-1937	21,000
1938-1941	2,030
1941-1946	.....	1,770
1946-1950	.....	5,600
1951-1955	.....	12,970
1956 only	.....	4,330.
1957 only	.....	4,430
1958 only	.....	5,040
1952-1958	.....	24,920
1950-1965*	.....	50,000(in old currency)
1966-1970	.....	71,000(planned)

*The currency change took place in 1961 under which prices were reduced from 100 to 10 rubles.

In the development of kolkhozes the machines and tractor stations have played a major part and became focal points of state supervision of collective farming on local level. They strengthened kolkhozes by providing machines. In 1932, machine-and tractor stations numbered 2,446 and by 1940 their number grew to 7,069 when they did 75 per cent of the ploughing, 52 per cent of the sowing, and 43 per cent of the grain harvesting for the kolkhozes.¹ Later on, when the Soviet agriculture entered the new stage of its development, the

1. V.Papov - Agriculture in USSR pp.47-48, Progress Publication, Moscow, 1967.

machine-and-tractor stations did not satisfy modern conditions. As the collective farms were in a position to acquire their own machinery the machine-and-tractor stations were abolished in 1958. However, they were reorganised into technical repair workshops and their machinery and equipment were sold to the Kolkhozes as they were in a position to buy these equipments and operate them. At the same time MTS were organised to serve the collective farms with specialised equipment (land reclamation machines, excavators, ditching machines etc.).

In 1961 an organisation was set up, known as the USSR Council of Ministers Federal Amalgamation, for the sale of agricultural machinery, spare parts, mineral, fertilisers and other material and technical facilities to the kolkhozes and sovkhoses, and made responsible for arranging for the repair of the machinery owned by the kolkhozes and sovkhoses..

PRICE FIXATION:

The price of the produce is fixed by the state. The basis of fixation of price is not the competitive market price. Rather it is production oriented price which is like the price stabilization programme of U.S.A. and Great Britain. Such a pricing system is inevitable

for USSR. In the absence of such a system the collective farms and state farms may compete with each other and any fall in the income of kolkhozes or sovkhos will effect the entire economy of the country. Thus the state guarantees a fixed price for the production sold under control and also pays a 50 per cent bonus for all produce delivered in excess of the contracted quantity. Through this system government procures food stock and helps the collective farmers in earning their bread. In order to increase their productivity in 1950-51 on the initiative of the kolkhoz rank-and-file, kolkhozes agreed ~~an~~ ^{on} a mass to put their affairs on a still sounder organisational basis. This was imperative because of the rapid growth in the productive forces of agriculture. Small kolkhozes impeded technological progress and further advances in farming. Alongside of this, the state and the kolkhozes themselves invested still more heavily in agriculture, and the farm machinery industry continued to expand.¹ On an average one kolkhoz cultivates about 6000 hectares of arable land and possesses about fifty tractors as well as harvester-combines, truck and other farm machinery and equipment. In 1971 the investment funds ^{of} kolkhozes rose to 64,200 million roubles.

1. Ibid p. 24

In 1971 the Soviet Agriculture (Kolkhozes and Sovkhozes) produced 3.1 times (in comparable prices) as much as what was obtained in the good-weather year of 1913. During 1966-70, the Eighth Five-Year Plan period, the average annual output of cereals, potatoes, milk, meat, sunflower, eggs, raw cotton and sugar beet was 2.4, 2.3, 2.7, 2.8, 3.4, 3.2, 10 odd, and 11 times what it was in 1924-23, the period before mass collectivisation began.

The growth in the marketability of farm produces has also increased as given below:

TABLE-7
STATE PURCHASES OF MAIN ITEMS OF FARM PRODUCE

(Annual average in million of metric						
Items	1928	1940	1951-55	1956-60	1961-65	1966-70
Cereals	10.8	36.4	34.2	47.9	51.6	66.0
Raw cotton	0.8	2.2	3.9	4.4	5.0	6.1
Sugar Beet	9.4	17.4	23.7	42.9	55.4	74.4
Sunflower	1.1	1.5	1.6	2.2	3.4	4.7
Flax fibre (1000 tons)	173.0	245.0	206.0	381.0	376.0	421.0
Potatoes	1.1	8.5	5.7	7.6	8.4	11.0
Other vegetables	-	3.0	2.6	4.3	6.7	9.4
Meat(including poultry, live-weight)	1.8	2.2	3.5	6.1	8.6	11.6
Milk	1.9	6.5	11.0	22.2	31.1	43.2
Eggs(1000 mlrs)	2.6	2.7	2.6	4.9	8.7	14.4

SOURCE: The Prosperous Collective Farm, Moscow, 1973, p.26

In brief the production and market surplus is increasing rapidly in USSR. From 1951 to 1970 the annual rate of increase averaged 4.1 per cent in the USSR while during the same period it stood at 1.7 per cent in U.S.A.¹

The current Five Year Plan of USSR envisages a high rate of growth in agricultural production. Gross agricultural returns for 1971-75 are expected to be 20 to 22 per cent higher than in 1966-70. Within a short period of their existence the kolkhozes made a landmark in the agricultural economy of the Soviet Union. In the early years of collectivisation a kolkhoz generally embraced a village, several kolkhozes being organised in large villages in 1932; an average kolkhoz had 71 households, 434 hectares of socialised land under crops, 42 head of cattle, 15 pigs and 54 head of sheep and goats. In 1963 a kolkhoz had an average 411 households and 2,896 hectares of socialised land under crops, 944 head of publicly-owned cattle, 404 pigs and 1,555 head of sheep and goats. At the end of 1963, they owned 1,241,000 tractors (in terms of 15 h.p. units), 235,000 grain harvesting combines, 444,000 motor lorries and a huge amount of equipment. In 1964 the sown area of collective farms increased to 114.0 million hectares. Out of

1. It does not mean that the productivity per acre is high in USSR in comparison to USA. Still the average output of Soviet farms is 85.9 per cent of the U.S.A.'s Farm.

the total production (as given below) the share of kol-khozes was 70 per cent in foodgrains, 60 per cent potatoes, 60 per cent in milk and 65 per cent in total meat production of USSR.

TABLE -8

<u>USSR Production</u> <u>in 1964</u>	<u>Million Tons</u>
Foodgrains	152.0
Potatoes	93.6
Meat	8.3
Milk	63.3

The total area under technical crops only (sugar beet, tobacco, cotton, flax, sunflower, etc.) was 15.5 million hectares which is divided into three parts—collective farms 10 million hectares, state farms 3.4 million hectares, personal belongings¹ or individually owned 1.6 million hectares. Today, there are 39,500 kolkhozes (collective farms) in the Soviet Union. A comparison of production figures between 1909 and 1963 shows a great change in the total production, production per hectare and productivity per worker in USSR. For example, the average per capita~~production~~ production of grain has increased to 5.30 to 5.50 quintals and the per hectare production of different types of crops has increased many times. Likewise, the total production has also

1. In 1963 the total area of personal plots worked by kol-khoz farmers (16.1 million house-hold) was 5.1 million hectares; of which 4.2 million hectares were arable land. At the beginning of 1963 kol-khoz farmers individually owned 14.9 million head of cattle (including 9.6 million cows), over 10 million pigs and over 22 million sheep & goats.

increased from five milliard puds before revolution to 107.9 million tons in 1963 as shown in the following table.

TABLE - 9
GRAIN-PRODUCTION IN USSR

Years	(in all categories of farms)				
	Area under grain crop (million hectares)	Crop capacity per hectare (in cent)	Gross output (million tons)	Out State grain production (million tons)	Per capita production (Kg)
1909-1913	104.2	6.9	72.5	--	480
1918 only	104.6	8.2	86.0	--	540
1921 only	72.0	5.0	36.2	3.0	265
1928-1932	94.0	7.5	73.6	18.2	400
1933-1937	102.0	7.1	72.9	27.5	415
1938-1940	101.0	7.7	77.9	33.1	430
1949-1953	105.0	7.7	80.9	32.8	445
1954-1958	123.0	9.1	110.3	43.5	560
1958 only	121.5	11.1	134.7	56.6	660
1959-1963	123.0	10.2	124.7	49.4	580
1963 only	130.0	8.3	107.9	44.8	476

1 cent = 16 kilogrammes

SOURCE: A.B.Pomaychanko : The Ways of Raising Agriculture Society, Knowledge of Russian Federation, p.7.

PLAN AND AGRICULTURE:

Even today agriculture occupies an important place in the economy of the Soviet Union. For future development of agriculture the 1966-1970 plan has earmarked

71,000 million roubles for its development and aims at increasing the production of farm and animal produce and to ensure a high and stable growth rate for it. It has been planned to increase the annual average volume of all farm produce, over the next five years, by 25 per cent, as compared with the preceding five-year period. The annual average grain output is to go up by 30 per cent to 167 million tons. The annual average production of farm products is to be increased as follows:

Sugar beet: to 30 million tons as against the 1961-65 average of 50 million tons; cotton: to 5.6 to 6 million tons as against 5 million tons; meat to 11 million tons as against 9.3 million tons; milk: to 78 million tons as against 65 million tons; eggs: to 34,000 million tons as against 29,000 million tons.

To achieve these targets several measures have been taken for enlarging the sowing area, increasing per hectare production and per capita output. Over and above these measures 'in the five years the collective and state farms will receive 1,790,000 tractors or 60 per cent more than in the preceding five years; 1,100,000 lorries; 550,000 grain harvesters and many other machines

and equipment.¹" "The measures envisaged in agriculture will cost a great deal, and the plan provides the necessary financial allocations, with more than 41,000 million roubles—roughly double the figures for the preceding five year period—going to cover the cost of building production facilities (including land improvement) and of machinery paid for by the state.²" In addition to capital investments by the state (in collective and state farms as mentioned above), the collective farms are expected, according to preliminary estimates, to invest about 30,000 million roubles in the expansion of the economy.

It has been planned to set up seasonal branches of food and light industry plants on the collective and state farms. The state will provide necessary assistance to the collective farms in setting up such industries, This programme will enable the collective farms to use the manpower available on the collective and state farms though not fully used at present throughout the year.

With these measures in the current five years (1966-1970), the average annual incomes of collective farms are to go up by more than 40 per cent as compared

1. A.B. Pomaychanko: The Ways of Raising Agriculture Society, Knowledge of Russian Federation, Moscos, p. 53.

2. Ibid, 55.

with the average for 1961-65¹. The growth of collective farm incomes will make it possible to increase the earnings of each farm's overall economic results achieved, a fact that will be an incentive to collective farmers in making the collective farm and its branches more profitable undertakings. This will serve to consolidate the economic basis of the collective farm as a form of socialist agriculture.*

The present plan envisages increase in the number of tractors, containers, and other heavy agricultural machinery for integrated mechanisation and automation. The kolkhozes & savkhoss are to be supplied farm machinery to the tune of 15,000 million roubles. Emphasis has been laid for increasing heavy trucks more suitable for cross-country driving, special purpose motor transport, buses and highly efficient land improvement and excavating machinery adapted to the different climate and geographical zones. During the current five year plan period another three million hectares of irrigated land are to be brought under cultivation; 41 million hectares of pasture lands are to be supplied with water and another five million hectares of arable land will be drained. It has been planned to make more

1. Ibid., p. 56

*. Quoted from Sami Uddin; Cooperative Collective Farms (Kolkhozes) in Economy of USSR, Khadi Gram Odyog, Bombay, November 1966, pp. 179-199.

efficient use of irrigated and drained farm land. In order to meet out the requirements of fertilizer the state has also planned to develop extensive industrial complex.

MANAGEMENT:

Kolkhozes are cooperative-agricultural enterprises and therefore, in accordance with the principles of cooperation, they are managed along socialist democratic lines. The General Body meeting is the highest administrative body. It frames the policy and take important decisions like amendments in the rules, election of the administrative bodies, admission of members, expulsion of members, approval of annual production and financial plan and annual report, determination of the size of the public funds, amount of the produce and money to be distributed among the members, fixing of output targets etc.

The General Body elects a Board in its general meeting for a period of two years. Generally nine members are elected to the board. This board is an executive body. The chairman of the Kolkhoz is also elected in the General Meeting who is responsible for the management of the Kolkhoz and functions are Chairman of the Board. The main function of the chairman and the Board is to ensure a balanced growth of the Kolkhoz and fulfilment of production targets as well as procurement.

plans. The Board appoints team leaders, section managers and other kolkhoz functionaries; guides their work, organises and checks the fulfilment of decision of the general meeting and of its own orders. Board meetings, held at regular intervals, consider long-range development problems, the plans and reports of the various teams, sections and enterprises of the kolkhoz and problems related to the management of current agricultural work, and the work of the cultural and community establishments. In this activities the chairman is guided by the rules, the decisions adopted by the General Meetings, the Board and by the Existing Legislation.

The general meeting elects an auditing commission to supervise the economic and financial activity of the board. It checks the correctness of payments made by the kolkhoz to its members, verifies the receipt and payment record of the kolkhoz and checks whether the resources are utilised in strict conformance with the Rules; property is safely stored, accounts are kept correctly, payments are made in time and debts are cleared without delay. The results of these checks of the economic and financial activities of the board are recorded in statements and submitted to the general meeting for approval.

The Board, its chairman and the auditing commission are responsible to the general meeting and can be removed before their term of office expires if they do not justify the trust placed in them by the members. Every member of the kolkhoz has the right to vote and to be elected to administrative bodies.

Members of the board may be in charge of certain branches or sections, or be directly employed in production. Specialists (agronomists, zootechnicians, mechanical engineers) on the staff of every kolkhoz organise the work of the respective branches of production.

PAYMENT:

The payment is made on the work day unit. This unit represents a specific economic category which is the product of the kolkhoz system. The income of a farmer depends not only on the number of such units to one's credit, but also on the amount in cash and kind that this amount was worth, which in turn depended on the financial position of a particular kolkhoz to which the farmer belonged. A work day unit of a prosperous farm may provide more in comparison to the work day unit of a poor collective farm.

It is unbelievable that the farmers would have not

resisted against the work day unit although the Russia literature is silent on this issue. On July 1, 1966, the kolkhozes introduced a system of guaranteed monthly cash payments like sovkhoses. In order to meet the members' requirements for farm produce, the kolkhozes build up a stock in kind comprised of a definite position of the grain harvested, other produce obtained, and also fodder, which are either given out as an advance against forthcoming cash payments, or directly sold in amounts and according to procedures fixed at the ~~kolkhoz general meeting~~. Finally, should a kolkhoz have insufficient funds of its own to guarantee the monthly payments, it obtains a loan for the purpose from the State Bank—another way in which the government is helping the kolkhozes financially to implement the decision taken.

After the transition was effected to the guaranteed system of payments, such payments to the collective farmers greatly increased, soaring from over 7,000 million roubles in 1965 to over 15,000 million in 1971. It is not worthy that, though sovkhos wages and salaries have also greatly increased in recent years, payments to collective farmers have almost trebled in these eleven years, the idea being to even out payment for work done throughout agriculture generally.

The 24th CPSU Congress Directives on the 1971-75 Five-Year Plan for USSR Economic Development provide for still higher pay in agriculture. There is to be a 30 and 35 per cent increase during the next Five-Year Plan period.

The farmer also gets bonus for the efficient and good work which is counted with reference to increase in production and quality produced. In order to provide incentives to farmers orders and medals are conferred, titles are given and badges of distinctions are awarded.

PRIVATE INCOME:

The farmers have some private land on which they produce vegetables, fruits and can develop poultry, pigging^{2/} etc. The vegetables and fruits of this private land are also sold in the collective farms market' located in towns and cities. Generally the prices of cabbage, carrot, potatoes and tomatoes etc., sold in the collective farms markets are higher in comparison to the prices of these products sold through Government agency. In view of their good quality they are much in demand even at higher price.¹

1. Based on my personal case study of Collective Farm Markets of Russia in 1966.

On this private land given to the farmer out of the land of collective farms, the farmer and his family members can work. Hired labour cannot be engaged nor the poultry birds or pigs can be increased beyond a fixed number. The existence of private sector indicates the necessity of supplementing the income of farmers.

In short the Kolkhozes¹ function under the supervision of trusted party members who generally occupy the position of chairman. The government provides assistance - financial material and moral to achieve the targets of production. The Kolkhozniks (collective farmers) having no alternate occupation work on these farms. Any person responsible for delay in farming operations has to bear the consequences according to the law of the state.

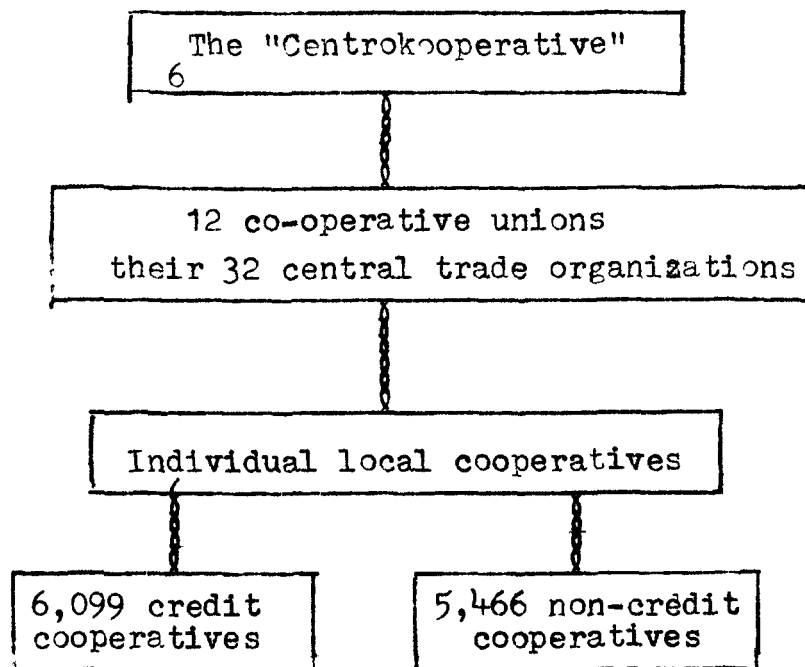
1. See Appendix 'K' for further details.

COOPERATIVE FARMING IN CZECHOSLOVAKIA

The agricultural cooperatives were introduced in Czechoslovakia in the latter half of the 19th century. During this period the movement was influenced by the working of cooperatives in Germany. The Raiffeisen model was accepted invariably by all the societies. The farmers storage societies, marketing societies dealing with cattles, eggs, poultry, fruit, vegetables were established on limited as well as unlimited liability basis. The processing societies, cattle breeding societies and grazing cooperatives were also common during this period.

The primary agricultural cooperatives operated as a rule within a limited local area (one or more villages). The Centralized cooperative organisation known as Central Cooperatives were operating as banking, trading and auditing centres for the primary cooperatives. The apex organisation working at the National level was 'CENTROKOOOPERATIVE'. It was a representative body of the cooperative movement responsible for the guidance, supervision and audit of central cooperative organisations working in the country as well as maintaining relationship with the International Organisations.

The organisational structure can be illustrated through the diagram as given below:



After Czechoslovakia's liberation from Nazi occupation after the downfall of Hitler in 1945, the Soviet Army took the command of Czechoslovakia and established peoples Democratic rule based on the alliance between the working class and the working peasantry. The National Committee an authority exercising the power of the people confiscated land owned by Germans, Hungarians and other loyal to the then Government. The farmers commission came into existence and the work of distribution of land was entrusted to it. In this

commission the key positions were given to the agricultural labour and small farmers. The middle farmers were not represented while the big farmers (kulaks) were not eligible to become member. About 2946395 hectares of land was confiscated and distributed among peasants and state.

The communist party led the peasantry to a further development of the revolution by proclaiming what became known as the 'HRADEC PROGRAMME' whose essence consisted primarily in the demand for revision of the deceptive "land reform" carried out in the pre-war capitalist Czechoslovak Republic—a process which had merely served to enrich the big land owners and "kulaks" while an absolute majority of the working villagers had not benefited by it in the least.

Furthermore, the Communists proposed a new land reform which would put into effect the principle that "land should belong to those who cultivate it", by means of expropriation and redistribution of all land held for speculative purposes and of all land in excess of 50.0 hectares per farm.¹

1. The latest legislation in UAR also prescribed that one person can possess only 50 acres of land, in India land ceiling has also been imposed.

The Hradec Programme included a number of other demands, such as tax reductions, the abolition of price disparities, the establishment of cooperatives, the "co-operativization" of sugar-refining joint-stock companies, the introduction of peasants' insurance, cheap state credit for farmers etc.^{w1}

After 1945 the peoples Democratic Government had entrusted to the storage cooperatives a virtual monopoly in the collection and purchasing of agricultural and dairy produce, including cattle for slaughter. The processing and a productive cooperatives (distilleries) were also helped by the Government to oust the private joint stock agricultural concerns. The government also encouraged the establishment of Machine cooperatives in which the working peasants with substantial support from the Ministry of Agriculture (headed of course by a communist) could obtain modern machinery which no individual small farmer could possibly afford to buy himself. Such machine cooperatives were established at local as well as district level. Several new agricultural production cooperatives were started to operate towards the end of 1945 and at the beginning of 1948 known as cooperative farms and peasants associations.

w1. Ibid., p.28

The cooperative farms came into existence as a consequence of the fact that some of the farmers expropriated during the land reforms affected after the liberation of Czechoslovakia had not been spilt up, but assigned for collective cooperative cultivation either to the former wage earning labourers on the farm or to other eligible applicants. The peasants association are the pioneer of large scale cooperative agricultural production through amalgamation of scattered, individual peasant farms. At the end of 1946 there were 24 agricultural production cooperatives in Czechoslovakia cultivating 4266 hectares of farms land with 406 members.¹ On an average one society had 178 hectares of land with 17 members.

From the point of view of the class essence of cooperatives, in the period of transition of the national and democratic revolution into a socialist one, the agricultural cooperative movement can be classified into various categories on the basis of ownership, work and distribution of income e.g., collective capitalist enterprises, collective enterprises of small scale producers and embryonic socialist enterprises.

Those agricultural cooperatives were regarded as collective capitalist enterprises in which the business

1. Ibid., p. 34

class was dominating (In 1947, these cooperatives had 36,112 permanent and 9,125 seasonal employees. Practically the only change that took place in these cooperatives was a limited extension of the scope of membership to the working peasants. External economic and political conditions were insufficient to influence the class nature of agricultural cooperatives of this type. These cooperatives covered almost all the traditional processing, production, purchasing and marketing activities.

Collective enterprises of small scale producers were those in which farmers and peasants, engaged in small scale agricultural production, resorted to cooperative self-help- encouraged by the people's democratic Government - in order to obtain the necessary credit and other essentials, especially machines, which they subsequently owned collectively and with which they worked themselves, in collaboration, to improve their production and to reduce cost; furthermore, they used the common property to make their own work easier and not for the purpose of making profit.

This category included the "Kampelickas" and most of the machine and electricity cooperatives of that period. These cooperatives constituted the most impor-

tant transitional stage from private ownership, through partly-collective ownership, to socialist ownership of the means of production.

The embryonic socialist enterprises were agricultural cooperatives in which forms of socialist productive relations gradually came into being:

1. Collective ownership - either of all the means of production (cooperative farms), or of the basic means of production (peasants' associations) - based predominantly on personal work by the members, who were joint owners (co-partners);
2. the members' earnings (wages) were dependent to a greater extent on the amount of work done by them in cooperative society, and not on the amount of "capital" contributed;
3. the aim of production was to ensure a higher standard of living for the cooperatives' members.

In short the agricultural production cooperative combined within themselves embryonic elements of socialist productive relations and vestiges of capitalist relations, and from the point of view of their class character, represented the highest form of development of the agricultural cooperative movement in that period. This prepared the ground by 1948 to provide last communistic dozes to wipe out the remains, if any, of the

pre-revolution period, The unified agricultural cooperatives Act was passed in 1949 which provided for the amalgamation of various types of agricultural cooperatives working in the villages into societies of Uniform type. Thus unified agricultural cooperatives came into existence to undertake any kind of activity which would benefit the working peasantry. The work of mechanisation of farming, amalgamation of fields, collective cultivation of land, animal husbandary, etc., was undertaken by these cooperatives.

In due course of time the joint cultivation of land assumed several different forms in individual unified agricultural cooperatives, ranging from joint harvesting with collective use of machines, vehicles, implements to collective sowing without disturbing the individual boundaries of the land. The ploughing up of the field boundaries in 1950 marked the beginning of collectivization on Russian pattern. Resentment against this policy was suppressed due to confiscation of property and compulsory sale of agricultural machinery etc., by kulaks to the state which deteriorated the social and financial status of rural elite. Thus they had to surrender before the powerful Government having full support of USSR.

In start, a great expansion of cooperatives on socialist lines took place in 1950 and onward. The Russian Collective Farming System provided the guide lines for its development. In 1959 the government recommended that small cooperatives should amalgamate to form larger ones wherever natural economic and political conditions allow to do so. The amalgamation of U.A.C's which began in 1960 marked the beginning of a new era in their development, a stage of application of large scale production method in agriculture. The policy of amalgamation carried out between 1961 and 1963 reduced the number of U.A.C's from 12560 to 7620. Consequently the size of cultivating unit increased to 724 hectares of land. These new cooperatives were true socialist large-scale production enterprises having most upto date equipment and necessary conditions for steady growth of production which guaranteed a rising standard of living of the cooperative farmers. Their development firmly established socialist productive relations in Czechoslovak agriculture with their peculiar characteristics as given below:

1. they constitute a group form of socialist ownership of the means of production and of the results of cooperative farming;
2. they are based on their members' personal work;
3. the principles of socialist remuneration for work according to the amount and quality of the work done - are applied in them.

What remains under the cooperative farmers' private ownership is practically only the land and the family holding. The formal private ownership of means of production however, gradually loses importance for members of U.A.C's as they no longer receive compensation for the use of the land contributed by them to the cooperative society.

In recent years the farmers have begun to establish "joint family holdings" in many cooperatives, i.e. units created by amalgamating the private family holdings and cultivated collectively. The cooperators get the produce raised on this land and compensate the cooperative society for the costs incurred in cultivating it. At the end of 1963, there were 3,759 U.A.C's "joint family holdings" in the Czechoslovak Socialist Republic.¹

In short the Lenins Cooperative Plan was enforced in Czechoslovakia and collectivisation was gradually introduced in the field of agriculture. The state provided short term (operational) and long term (capital construction) credit loans. The state also exerted influence through concentration of machines and other

1. UAC as well as its Board of Directors like USSR.

means of mechanization in the machine and Tractor Stations which helped in the mechanization of agricultural cooperatives in the cultivation of crops. After the completion of the process of collectivization, these MTS were also reorganised and the machines were transferred to the unified agricultural cooperatives.

The unified agricultural cooperatives are managed by the members according to the rules laid down by the UAC within the directives of the state. The General Body is the supreme authority. The Board of management is elected by the general body. The member of the Board ranges from 5 to 15 according to the size of the cooperative. The chairman is also elected in the General Meeting. The Audit Commission supervises and controls the UAC. It checks and supervises every thing done by the cooperative and its officers, involving accounts, observance of rules and regulations, implementations of policies, use of cooperative property etc.

The payment of work done is almost on the pattern adopted earlier by USSR. At present the remuneration is paid in two ways — Remuneration by labour unit and direct cash remuneration. A labour unit is a simple form of yard stick for measuring the work. It is expected that Czechoslovakia will shortly introduce monthly wages system on the pattern of USSR. In short the cooperative farming system of this country can be called as the exten-

COOPERATIVE FARMING IN POLAND

Poland is a small country of about 31,339 thousands of population with an area of 311.7 thousand kilometres. During the period of socialist development it has made a marked progress in the social, economic and cultural development and the cooperatives of Poland have made a major contribution in the balanced development of Polish economy. They have not only helped in recovering the losses sustained by the country during the Second World War but helped the nation to march ahead in building up socialism.

The Supreme Cooperative Council is the representative of Polish cooperative movement. All Polish cooperative societies are affiliated to the nine below mentioned Central Cooperative Unions.

- i). Central Agricultural Union of the Peasant Self-Aid Cooperatives.
- ii). Central Union of Dairy Cooperatives.
- iii). Central Union of Market-Cardening Cooperatives.
- iv). Union of Savings-and-Credit Cooperatives.
- v). Central Union of Agricultural Productive Cooperatives.
- vi). SPOLEM Union of Consumer's Cooperatives.
- vii). Central Union of Productive Cooperatives.
- viii). Central Union of Handicraft Supply and Purchase Cooperatives.
- ix). Central Union of Housing Cooperatives.

The Central Union affiliates, 1,783 agricultural productive cooperatives with 30,262 members cultivating 256,277 hectares of land. The main purpose of an agricultural productive cooperative is to associate for common farming. There are three types of cooperative societies in Poland, namely, cooperatives in which the cooperators give all their land, except small allotments, and whole stock and live stock, for common husbandry, cooperatives in which the cooperators give a part of their land for common cultivation, and lastly, the cooperatives organised for common cultivation of certain plants such as tobacco, hop or vegetables or for common breeding. The members give their stock and livestock to the cooperatives on payable basis.

Thus, by adopting the system of cooperative farming it has been made possible to apply modern machinery and new agro-technical advances. But the cooperative farming societies of Poland differ from the cooperative collective farms of USSR and the cooperative farming societies of Czechoslovakia and G.D.R. The main feature of these cooperatives consists in the fact that each member is obliged to give for common use all his land or its part and the stock and livestock indispensable for farming as well as to work on the farm himself. But on the

other hand, the members who gave their land to the cooperative preserve their right of property and the same land, or any other conveniently situated, is duly returned to them, if they wish to leave the society. A synoptic view of the collective farms, distribution of incomes, families who have joined the farms, total membership, area of land and livestock can be had from the following table:

TABLE - 10

Table Showing Registered Cooperative Farms
(Farming Collectively) on December 31,
1965

	1950	1955	1960	1961	1962	1963	1964
Cooperative Farms	2199	9790	2072	1934	1558	1367	1291

The cooperative farms use tractors although horses are generally used for ploughing the lands. The number of tractors used by these cooperative farms etc., is as follows:

TABLE - 11

Tractors Used in Agriculture on December 31, 1965

	1950	1955	1960	1961	1962	1963	1964
1. Agricultural circles.	--	--	6910	13906	20237	28367	36500
2. Cooperative farms	106	244	2147	2386	2717	3033	3350
3. State farms	21074	28127	28585	31951	37952	42862	48875
4. State Machine stations.	7231	19971	11847	10834	9935	9259	8775
TOTAL	28411	48342	61989	71577	83341	96021	110000

A number of cooperative farms are electrified as is evident from the following table.

TABLE - 12
Electrified Farms (in June 1965)

	1955	1960	1961	1962	1963	1964
In percentage of farms of the given group						
1. Private Farms	31.6	58.1	63.3	65.7	69.6	72.7
2. Farms belonging to members of cooperative farms	69.3	74.9	73.7	82.5	95.9	88.3
3. Cooperative farms	65.6	64.3	68.5	72.5	82.8	88.5
4. State Farms:						
a) Under the Ministry of Agriculture	66.2	89.2	90.0	95.1	96.3	97.0
b) Non-Agriculture Departments	--	78.6	81.3	85.4	88.1	90.7

The Cooperative farms encourage livestock breeding and generally all the cooperative farms have livestock as a subsidiary means of their income. The following table gives the livestock position of cooperative farms:

TABLE - 13 (in Thousands)

Year	Cattle		Pigs		Sheep	Horses
	Total	of which cows	Total	of which cows		
1950	35,9	26,0	40,2	6,8	10,9	14,3
1960	92,0	58,4	143,4	18,7	52,8	21,5
1963	87,4	50,6	114,8	13,7	33,9	11,9
1964	90,2	49,4	116,1	16,2	31,8	10,5

The above tables show that the cooperative farms have made a steady progress during the last fifteen years. The regional Cooperative Unions and other cooperative organisations provide incentives to the farmers and the state encourages the development of these farms by making contracts with the cooperative organisations for purchasing the agricultural produce, Thus the cooperative organisations finance the farmers (individual as well as members of the collective farms and enter into contracts for the supply of their produce to the cooperative organisations. Once the contract is signed, it is obligatory to fulfil it. In this way the state is assured of the quantity of foodgrains etc., to be procured in the coming year and the farmers do not speculate with prices nor find it difficult to sell their produce. During the year 1964 purchase and obligatory delivery of four cereals from private and cooperative farms was 1516.1 thousands of tons which comes to about 47.5 percent of total purchases (excluding sowing seeds).

In short Poland has followed a mid-way and different types of cooperative farming societies have been encouraged in this country which resembles with the cooperative farms of developing countries with the exception that cooperatives are subject to strict state control in every respect in Poland.

COOPERATIVE FARMING IN CHINA

Immediately after the inauguration of the Republic the communist government of China proceeded to distribute land according to their declared policies and aims. The object of the chinese land reform was "to abolish the land ownership system of feudal exploitation and introduce the system of peasant land proprietorship in order to set free the productive forces for the rural area, develop agricultural production and thus pave the way for new China's industrialisation"¹

After land distribution the first step was the organisation of permanent and temporary mutual-aid teams. As a matter of fact these teams were the product of the then prevailing circumstances because confiscation of the surplus food, houses, draught animals and farm implements of the land-lords and their distribution among the poor farmer could provide only a part solution of the problem of supply of working capital.² The development of agrarian cooperatives

1. Planning Commission, Government of India, Report of the Indian Delegation to China on Agrarian Cooperatives, New Delhi, May 1957, p.30.

2. For details see Report of the Indian Delegation to China on Agrarian Cooperatives, Planning Commission, Government of India, New Delhi, May 1957, p.34

from the mutual aid-team was a comparatively slow process. In 1953 the effort at formation of co-operatives appears to have steepened and the party had to call for renewed efforts in 1954 and 1955. However on the recommendation of Chairman Mao, cooperativisation was prop^{ga}ated and by the end of 1955 a large majority of the cultivators had joined the cooperatives because of the advantages mentioned before the Indian delegation to China on Agrarian Cooperatives, namely, better cooperative planning, growing crops suitable to a particular soil, better facilities for permanent improvements, better division and utilisation of labour and an increase in cultivated area on the abolition of boundary lines.¹

The next step was the conversion of the co-operatives of the primary type into cooperatives of the advanced type. The difference between the two lay in the fact that in the former each individual member is entitled to a return from the land, which was either a fixed amount or a fixed portion of the net agricultural production after deducting production expenses. The remaining produce was shared by all according to the labour put in by each. There was thus a return for labour as well as for land ownership. In the advanced

1. Ibid., p. 35.

type of cooperatives there was no return for land ownership and the only return was for labour, with the ownership of the individual plots still holding good the benefits of unified management could not be obtained fully in the primary type of cooperatives. Individuals were reluctant for land development which affected adversely the individual plots though benefiting the cooperatives as a whole. And, of course, so long as the system of ownership of land prevailed, there was correspondingly a smaller return for labour and consequently less incentive for it. The return from the ownership was always smaller than the return from labour and in view of the small difference between the various classes of land owners (the difference not exceeding the proportion of 1 to 2) the conversion of a cooperative of a primary type into an advanced type was a comparatively easy step. During this period when the primary cooperatives were being converted into advanced cooperatives, there was a wave of socialist transformation which affected other sectors of the economy in China and resulted in a large scale conversion of private enterprise into public concerns. This also facilitated the growth of cooperatives of the advanced type.¹

1. Ibid., p. 36.

In fact the policy of collectivization of land was followed in a calculated manner. It was made¹ clear as early as 1951 in official Chinese announcements that Land Reform was merely the first step towards full collectivisation of agriculture on the Soviet pattern. Mr. Wu Chueh-Nugn, one of the Deputy Ministers had declared that 'the development of Chinese agriculture could be divided into three phases; the first was that of agrarian reforms; the second that of organisation of mutual assistance teams and agricultural cooperatives and the third that of socialisation of agriculture on a nation-wide scale, following the pattern of the collective farms of the Soviet Union'.²

Thus the final stage reached when the agricultural producers cooperatives were converted into fully socialistic communes, in which the members surrendered their ownership of land in favour of the commune. Land thus, became the collective property of the people of and income therefrom was utilized for the common benefit of the residents of the commune. The statute of the first commune that was set up in April, 1958, said that "when agricultural cooperatives merge into a

1. Ibid., p. 195

2. Peoples China, November 1, 1951.

People's Commune, they must turn over all their collectively owned property to the commune, in the communistic spirit of large-scale coordination." Even kitchen gardens were to be handed over. A commune covers large areas. Generally all the villages in a Hsiang (the lowest territorial administrative unit in China) are included in one commune. Membership of a commune of average size is 4797 households, though there are larger communes also, having as many as 60,000 members. The commune not only manages all the agricultural land of the area but also manages the industry that exists in that area. It is also incharge of the school and all the members of the commune form a militia. The functions of a commune were explained in glossary published in the Peking People's Daily on 4.9.1958. It said "the commune differs from farming cooperative in that they are organisations not solely engaged in agricultural production. They combine industry (the worker), agriculture (the farmer); exchange (the trade), culture and education (the student) and military affairs (militaryman) into one unit and take charge of political, economic, cultural and military affairs at the same time".

Thus a commune is a most comprehensive organisation and excels even the kolkhoz of Russia. The

members of a commune are not mere wage-earners. Apart from wages they get free supply of food in the shape of community meals. As an incentive to work, deserving persons are paid bonus. The management of farms is very efficient and the minimum quantity of work to be done by a member is fixed. Punishment is given for doing less work. Waste is avoided at every step so that maximum produce could be obtained at a minimum cost. Agriculture has thus been taken out of the subsistence economy into a commercial economy. Great progress has been made in the adoption of scientific methods in agriculture. Pure seed, improved implements, fertilizers and plant protection methods have been popularized. Small irrigation works have been executed in large numbers in the farms. The net result has been an increase in agricultural production.

On administration side the whole administration of the area under the commune has been handed over to it. The Government servants in the area became the servants of the Commune and work under the directions of the managing body.

The first commune was set up in April, 1958. It was named "Sputnik" and included 27 farmer producers' co-operatives with about 9000 households. By September, 1958, 23,397 Communes had been set up with a membership of 112 million.

By the end of 1958, 7,40,000 cooperatives had been merged in the 26000 communes. It was expected that the big units would be able to fare better in implementing the ambitious and scientific scheme of water conservation, irrigation and terracing of hill slopes by making use of the combined labour force. Soon after, however, it was noticed that too large a size was not conducive to successful operations and the bigger communes were sub-divided to get units of more manageable size. The total number of people's communes rose from 26000 to nearly 78000. In the interest of efficiency of work, the members are sub-divided into brigades. Each brigade more or less coincides with the former producer's cooperatives. The brigades are, again, sub-divided into 'work teams' which is the actual production unit and comprises 20 to 40 households. This unit is congruous with the former socialistic co-operatives.¹

The development and working of communes indicate that they are the product of China's political philosophy which can only be carried out by totalitarian political apparatus. It has rightly been said that if we isolate the communist ideology and the agrarian policy followed by the Chinese Government, we would

1. Bedi R.D., Theory History and Practice of Co-operation, Loyal Book Depot, Merrut, pp.179-181.

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give an erroneous impression that a similar policy can be followed by our country without adopting similar means. We feel that the execution of policy based on communist ideology is so dependent on the means adopted that the two are really inseparable.¹

1. See Minute of Dissent by Shri B.J.Patel and Shri F.N.Rana, Report of the Indian Delegation to China on Agrarian Cooperatives, Planning Commission Government of India, New Delhi, May 1957, p.193.

COOPERATIVE FARMING IN ISRAEL

Israel, known formerly as Palestine, is a small country whose economy is predominantly agricultural. As generally believed, Israel is not the birth place of communistic settlements. This pattern of life was found in Europe in the middle ages and in Eastern and North Eastern United States in the 18th and 19th centuries. Such settlements are still found in Canada and the United States, in Paraguay and Uruguay. There were mobile and temporary communitarian groups (Kibbutzim) in Palestine before 1910. The Kvutza, established in the Jordan valley in 1910, is generally considered the first settled communitarian group. The communistic settlements outside Israel, with a very few exceptions, are religious sects. In Israel the Kibbutz movement is a secular movement, with a strong nationalistic and political fervour. Ein Ganim was probably the first Moshav, a cooperative of small holders' settlement, established in Palestine in 1908. Even the pattern of the Moshav was found in Europe much earlier—in Czarist Russia in the second half of the 19th century and in Cyprus and Canada in the last quarter of the 19th

century. The Kibbutzim and the Moshavim are thus the speciality of the Jewish cooperative movement in Israel. In no other country in the world there are so many Kibbutzims and Moshavims as they are in Israel.¹

The official history of cooperative movement begins with the registration of Havrat Ovdim in 1923 under the cooperative societies Act. Its establishment provided a link between the labour movement and cooperative movement because its membership is the same as that of Histadrut - a Jewish Federation of Labour. About 80 per cent of the societies working in the country are member of Havrat Ovdim and any one who desires to be member of a cooperative society has to acquire its membership. Although Havrat Ovdim is not a federal body but it can veto any of the resolutions passed by a cooperative society.

About 1963 cooperative societies were working in Israel during 1970 out of which 1051 were agricultural cooperatives. They are responsible for more than 75 per cent of total agricultural production in the country.¹

1. Bedi R.D., Theory History and Practice of Co-opration, Loyal Book Depot Merrut, p. 136.

KIBBUTZ:

It may be defined as 'a voluntary commune, established on national land, whose members practice self-labour and where all means of production, consumption, education, health and municipal activities are owned and maintained collectively, and on a basis of equality, by the society'.¹ They occupy an important place in the cooperative movement of Israel and can be said as the proudest achievement of the Jewish people in the realm of cooperative & community organisation. It represents the only example where in comprehensive cooperation has been practised successfully for thrice generations. The first Kibbutz, now known as the Degania Aleph was established on the bank of river Jordan in 1909. About half of the total villages are covered by Kibbutz. Nearly 85,000 men, women & children reside in them. This amounts to about 24 per cent of the total agricultural population and about 5 per cent of total population of Israel.²

Kibbutzim are groups of persons with similar economic and social status and a common political ideology, who decide to establish cooperative communities on socialistic principles, i.e., each should labour for the

1. Ibid., p. 137.

2. Report of the Study Team on the working of the cooperative movement in Yugoslavia and Israel, Ministry of community development & cooperation, Government of India. p. 77.

community according to his ability and share according to his needs. There are no wages except in kind and service. They combine cooperative ownership of all property except personal belongings—purchasing, production, marketing, consumption, rearing and educating children, cultural, recreational and other services. In a Kibbutz every one enjoys the same rights and assumes the same obligations. Theoretically, the use of wage labour is prohibited but in practice, it is in use. Most of the Kibbutzim accept, in principle, the view that hired labour in the Kibbutz is a temporary but absolutely necessary measure to reduce unemployment among the new immigrants and to increase agricultural production within the shortest possible time. According to the model rules, a member leaving the Kibbutz is not entitled "to withdraw any private belongings or money which he may have turned over to the Kibbutz when accepted as a member, unless such return was specifically provided for in a written agreement between him and the Kibbutz". Practically, all the Kibbutzim are members of one or the other federation. These federations are known as Thout (Movements). These are autonomous movements but are subject to guidance of and are closely linked to one or the other labour political parties. There are four such federations.

The Cooperative Agricultural Settlements (Moshavim) are of four types, viz., Moshavim Ovdim (labour small holders' agricultural settlements); Moshavim Shitufim (collective smallholders' settlements); Moshavim Olim (Immigrant smallholders' settlements); and Kfarim Shitufim (cooperative villages). The first three types of Moshavim accepted only those who were members of Histadrut and of Chevrat Haovdim. Moshavim Ovdim are the oldest of the four types. The first Moshav Ovdim was established in 1921. Moshavim Shitufim were organised in 1935 by immigrants from Bulgaria. Moshavim olim were introduced in 1948. Kfarim Shitufim were introduced about 1933 to meet the needs of immigrants from the Nazi dominated countries in Central and Western Europe. All the four Moshavim have two common characteristics: (a) practically all the land is leased from the Jewish National Fund; and (b) every member has his own house, Except for the Moshavim Shitufim, in which there is all inclusive cooperative joint production, every member in each of the other three types has a lease for and cultivates an equal area of land. With few exceptions there is no joint farming. But cooperative marketing and purchasing, water supply, use of agricultural machinery, educational and other communal services are obligatory basic principles in all the Moshavim.

It is only in Kfarim Shitufim that private trade, generally in grocery and dry goods, bakeries, etc., is permitted. Except the Moshav Shitufi there is one multi-purpose cooperative in every Moshav.

The Kfar Shitufi leases all the lands, owns all the means of production, etc. In the other types every member starts with the same initial equipment and other facilities. Mutual aid is an essential part of the working of Moshavim Ovdim and Moshavim Shitufim.

Moshavim Shitufim differ from Kibvutzim in three main respects: first, every member and his family in a Moshav Shitufi lives in his own house but the family may not use its land to raise produce for the market. The Moshav Shitufi provides common dining rooms, and kitchen facilities only for unattached members. Some of them also have joint laundry facilities, club rooms, etc. Secondly, a Moshav Shitufi fixes the same allowance for adults, children and dependants irrespective of the kind of work which is assigned to them. Members may spend their allowances according to their choice but only at the local community store. In special cases permission may also be granted for purchasing outside. Thirdly, a member leaving a Moshav Shitufi may take the family's possessions and also receive his credit balance, inclu-

ding his share in the refundable capital, reserves and other funds.¹

Management in a Kibbutz has the usual paraphernalia of a cooperative society, namely, general assembly and an elected managing committee. As a registered cooperative society, a kibbutz conforms to the usual requirements of cooperative law and practice. For instance, the liability of members under the bye-laws is limited to 50 pounds. Again, the accounts of a kibbutz are subject to audit.²

The evolution of cooperative farming system(Kibbutz) in Israil, in short, is unique. It is a secular movement with a strong nationalistic fey^rour. The reason behind its success is the determination of Jews to survive against adversities. More over they have the advantage that in this process land owners (Jews) are not dislodged rather they have been absorbed in farming with all modern equipment at their command.

1. Hajela T.N., Principles, Problems & Practice of Cooperation, Shiva Lal Agarwala & Company, Agra. pp. 151-152.

2. Report of the Study Team on the Working of the Cooperative Movement in Yugoslavia and Israel, Ministry of Community Development & Cooperation Government of India, n. 80.

COOPERATIVE FARMING IN UGANDA

Uganda is a small country with a population of 72,00,000 having a total area of about 94,000 sq.miles. It is predominantly an agricultural land which contributes about 86 per cent to the national domestic production and shares 90 per cent in the total export earnings.

Cooperatives in the country began spontaneously. The small marketing groups formed by the African farmers as early as 1913, initiated the movement. The Uganda Cooperative Association followed, in 1923, with primary societies as its affiliates. This Union was engaged mostly in marketing coffee and cotton. The real start of the movement, however, came with the adoption of the Cooperative Societies ordinance and the appointment of the Registrar in 1946.¹

In the field of farming three cooperatives were organised by 1965 - one in the Western Region and two in the Northern Region. In the group farming scheme, 28 societies and nearly 3,300 of their farmer-members participated. The problems of defaults continued to be graver here than in the credit scheme, Of the £ 26,384 worth of tractor

1. Cooperative Movement Afro-Asian Countries, Afro-Asian Rural Reconstruction Organisation, Defence Colony, New Delhi. p. 63.

cultivation and other services rendered to the societies only £ 15.092 was repaid, leaving a balance of £ 11,292 (43 per cent) of loans unpaid.¹

In short, cooperative farming is carried out on a small scale. The problems faced by these societies are similar to that of our country viz., over dues, non-payment of necessary service charges etc.

1. Ibid., p. 72.

COOPERATIVE FARMING IN THE SYRIAN ARAB REPUBLIC

The cooperative movement was inaugurated in Syria in 1943 but the official recognition was awarded in 1950 when the first Cooperation Law was enacted in Syria. A rapid development of cooperatives took place during 1958-61. The Union with Egypt in 1958, brought many changes in the cooperative movement of Syria also and the Egyptian Cooperative Law was applied in Syria with some modifications. The primary cooperative societies consist mainly of Thrift and Credit cooperatives and Agricultural Cooperatives which are multi-purpose both in the Agrarian Reform areas and outside. The primary cooperatives have been organised in the areas where Agrarian Reform measures have been completed under the Agrarian Reform Law enacted in September 1958. The functions of an Agrarian Reform Cooperative include:

- a). secure various kinds of agricultural credit according to the requirements of this lands owned by the members;
- b). supply to the farmers the means to make the best use of land and also essential farm requisites like fertilizers, livestock, seeds agricultural machinery, transport, etc;
- c). organize cultivation of land in the best possible manner, including seed selection, crop rotation, pest control, canal and drainage works, well-drilling etc:

- d). market the produce of the members on their behalf provided that the society deducts from the sale proceeds the instalments due on account of the price of the land given to the members, taxes and others liabilities of the members incurred as members of the society;
- e). provide other services needed by the members and also arrange for providing social services.¹

The future cooperative models under consideration may take the following course:

- 1). A Cooperative Farming Model in which every farmer will have his own piece of land, but the cooperative will establish the production plan. Most of the work will be accomplished jointly, though there would be items like weeding, cleaning, interior irrigation etc. which will be the responsibility of the individual. This type may be established on the irrigated land distributed under the Agrarian Reform.
- 2). A Collective Farming Model, similar to the Bulgarian type, with some adjustments to the local conditions in Syria. This type may be on such lands which cannot be parcelled into strips.
- 3). A State Farm Model for state owned lands where rainfed farming predominates and where there is a scarcity of manual labour.

Together with the above three models, the Service Type of Agricultural cooperatives could continue and may be encouraged among those having very small holdings and those having lands near cities who can engage in the production of vegetables and fruits.²

1. Cooperative Movements in Afro-Asian Countries, Afro-Asian Rural Reconstruction Organisation, Defence Colony, New Delhi, p. 183.

COOPERATIVE FARMING IN NIGERIA

Nigeria attained independence in 1960 and became a Republic within the Commonwealth in 1963. In 1963 its population including Biafra was 55.6 million with an area of 356,669 sq.miles. Agriculture employs about 73 per cent to 80 per cent of the working population and accounts for 50 per cent of the gross national income.

The cooperative movement was introduced in 1922 by the Department of Agriculture. A number of cooperative societies have developed since then. More than 30 cooperative farming societies are engaged in growing maize and rice in Oyo Division. The members plots of land are pooled to facilitate the use of modern farming equipment. The Ministry of Agriculture provides tractors on reasonable hire charges payable after the sale of the crop. The cooperative farming societies have no impact on the economy of Nigeria nor it has been followed on a large scale.

CO-OPERATIVE FARMING IN IRAQ

Iraq is an agricultural country having a total cultivable area of about 1,20,30,000 hectares. The cooperative movement saw the light of the day in 1944 when the first cooperative law was passed in Iraq. The main object behind the movement was to enable the working classes, labourers and farmers to improve their economic condition through self help. The first agricultural cooperative society was organised in 1947.

A significant development in the sphere of agriculture started with the enactment of the Agrarian Reform Law of September 1958. All land in excess of the ceiling imposed by the government was requisitioned against compensation and distributed to landless farmers in small economic units of 30-60 dunums of irrigated land or 60-120 dunums of rain-fed land. Priority in the distribution of land was given to those farmers who have been cultivating the areas in question as tenant farmers. The beneficiaries are required under the law to join agricultural cooperatives which are multi-purpose in character.¹ The organization of Agricultural Cooperatives under the Agrarian Reform Law of 1958, started in 1961, when

1. The development of agrarian Reform Cooperative in Arab Republic of Egypt has also developed on similar lines. There is a wave of socialism in the West Asian countries and the Land Reform Laws of Muslim countries are similar in nature but some of them are marching towards socialism indiscriminately which has brought their near communism.

17 such societies were organized. Of these, 7 set up shops for the supply of household goods to their members. Ten others got loans from the Cooperative Bank for the purchasing selected seeds for distributing small sums among their members.

A basic of 50 per cent of appraised yearly net income (about 1D 70) for loans has been recommended and accepted by the Cooperative Bank. Members throughout have been informed of the exact terms under which they could borrow mostly in kind, and also the terms for the repayment of the loans taken.¹

In short the object of increasing productivity has been achieved by using democratic instrument i.e. cooperatives.

1. Co-Operative Movement Afro-Asian Countries, Afro-Asian Rural Reconstruction Organisation, New Delhi, P. 112.

CONCLUSION:

The study of cooperative farming in USSR, Czechoslovakia, Poland, China, Israel, Uganda, Syria, Nigeria and Iraq reveals that:

Cooperative farming has been carried out on large scale in communist countries like USSR, Czechoslovakia, Poland etc. In these countries activities of the members are carefully watched by reliable party men who are also actively associated with the farm administration. The pattern of organisation and working differs from country to country but the basis of organisation and its philosophy is the same.

Measures which lead to cooperative farming have been vigorously implemented in some countries which have adopted socialist philosophy or have political or military alliance with such countries. Due to war conditions, economic necessity or strict attitude of the government in implementing land reforms, the cooperatives have developed with an element of compulsion and are fastly moving towards cooperativization of land and farming on socialist lines.

Cooperative farming has developed in a special environment in Israel which may be called as 'need of the nation'. Jews have converted sand into gold by heavy investment in land. As land is not the property of an individual, it was possible to develop farming on a cooperative basis in Israel in a democratic way.

The developing countries like Uganda, Nigeria etc. have

developed cooperative farming in order to boost up their economy by enlarging the unit of operation. Progress made so far, in the field of cooperative farming, is satisfactory from the point of view of production and negligible from the point of view of its political, social or economic importance.

It may be concluded from the above analysis that the best soil for the development of large scale cooperative farming has been 'socialist' while small scale cooperative farming can be practised in developing countries on voluntary basis. However, it has no scope in capitalist and other countries who have succeeded in establishing a welfare state. India, pursuing a middle of the road policy from different angles is hardly fit for large scale cooperative farming.

CHAPTER V

PROBLEMS AND PROSPECTS OF RURAL INDUSTRIES IN INDIA

In the previous chapter the potentiality of cooperative farming as a mean of increasing agricultural production in foreign countries has been discussed. It has been pointed out that cooperative farms of communist countries have a successful career in boosting up agricultural production and providing employment to the workers in slack season. The cooperative farms known as Kibbutz in Israel are working on voluntary and democratic lines and have delivered goods to the nation. However, these farms are financially sound and were set up by Jews with a missionary zeal to achieve their political aims. The cooperative farms of developing and newly independent countries, however, indicate a lopsided progress. They have not succeeded in boosting up production nor developed agro industries on cooperative farms. In this context the present chapter analyses the problems and prospects of rural industrialization in India through cooperative farming societies. In the context of India the desirability of industrial production on the basis of small, domestic and rural industries and the need for organising the rural masses on cooperative and federated lines appear to be the only means to relieve the distress of agricultural workers. They can ensure better living, and better application of inputs which can strengthen the farm economy and create surpluses. For

this a balanced agricultural and industrial development programme should be laid down in the light of the experience of developed countries whose examples are cited below.

In Japan and U.S.S.R. small scale industries have been developed on the farms. They are providing employment opportunities and supplementing income of the farmers. In Japan's 2,33,176 factories less than 3 persons were working in 1953 and the small industries constituted as much as 99.5 per cent of the establishments.¹ The 23rd Congress of the Communist Party of the Soviet Union has rightly remarked: "Because of the seasonal nature of farming, the manpower available on the state and collective farms is not being fully used throughout the year. It is, therefore, economic common sense to develop ancillary enterprises for the primary and subsequent processing of farm produce and the manufacture of other products and also to set up diverse industries depending on local condition in the farm land. This will also provide income to the collective and state farms and additional earnings to the rural population.

1. Sheltry, M.C., Small Scale and House Holdings Industries in a Developing Economy, Asia Publishing House, 1963, p.11.

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Consequently the Soviet Government has decided to give farm the necessary assistance in setting up such industries on collective and state farms."¹

It is clear from the above that the industrial countries have a rewarding experience of rural industries. They have eradicated poverty, provided employment and increased per capita income of agriculturists. Such industries have played an important role in stimulating the economy.

Before I proceed further to examine their role it will be worth while to clarify here the scope of handicrafts, cottage and small scale industries which are generally categorised as the 'Rural Industries' of India.

(1) HANDICRAFT INDUSTRIES Are those industries where the individual generally invests his capital and controls the entire process. He is in direct touch with the market and theoretically, at least, retains his economic independence. It is difficult to make any clear-cut distinction between handicrafts and industry on the basis of number of workers engaged. For legal

1. Directives on the Five Year Economic Plan of the USSR Soviet Union Novosti Press Agency, Publishing House, Moscow, 1966. p.57.

purposes, some attempts have been made to define handicrafts as enterprises employing not more than ten persons, or some other arbitrary figure. Those handicrafts which are carried on with the help of hired labour and with advances in cash or in raw material from capitalistic middlemen are known as 'variant handicraft' industries.

Perhaps one of the distinctive features of handicrafts can be described in the technical nature of the work and the size of the market. The handicraftsman turns out a fully finished product with the help of tools and even machinery. He produces mainly for the local market. Even here the boundry is flexible because some artistic products are of a less artistic type have foreign as well as home markets. For instance, rugs and carpets and certain handloom products have an international demand. In short, there cannot be a complete definition of handicrafts.

(2) SMALL SCALE INDUSTRIES: These are in various social respects closely related to handicrafts but in technical respects are nearer to large scale industry. No clear cut basis is employed for distinguishing the small scale industries from those of cottage industries. In fact

the general tendency is to mix up the two.

For example, the small scale industry surveys undertaken by the Research Programme Committee of the Planning Commission, do not generally distinguish between cottage and small scale establishments, but include all units which (a) use power and employ less than 10 workers (including family labour) or (b) do not use power but employ up to 20 workers. A more or less similar demarcation has been employed by the National Sample Survey in their series of rounds in the coverage of industries. Similarly, the various State Directorates of Industries restrict the term 'Small Scale' to such industrial establishment as fall beyond the purview of the Indian Factories Act, 1948. In other words, all establishments which employ less than 20 workers without the use of power or less than 10 workers using power, are generally treated as small scale industrial establishments.¹

As against this, the Development Commissioner for Small Scale Industries, Ministry of Commerce and Industry, Government of India, defines a small scale unit as that

1. Shetty M.S., Small Scale and House Holding industries in a Developing Economy, Asia Publishing House, 1963, p. 7.

which has capital assets not exceeding Rs. 5,00,000 and employs less than 50 persons if power is used, or less than 100 persons if no power is used. This definition generally excludes all industrial establishments which come under the ambit of the Industries Development and Regulation Act, 1951, on the higher side, and also excludes all those industries which are covered by the five other All India Boards.*

In the Second Plan for India small-scale industries are characterised as being of varied types, but their common features are their urban and semi-urban location and use of machines, power and modern techniques. They are run by small entrepreneurs or self supporting workers and sometimes by Cooperatives. The working definition adopted by the small scale Industries Board brings within the scope of the term 'small scale' industries all units or establishments having a capital of less than Rs. 5,00,000 and employing less than 50 persons when using power.¹

* Following are the All India Boards and Commission.

- (1) Khadi and Village Industry Commission.
- (2) All India Handicrafts Board.
- (3) All India Handloom Board.
- (4) All India Silk Board.
- (5) All India Coir Board.
- (6) Small-scale Industries Board.

1. I.L.C., Report of the Asian Technical Conference on

..contd

(3) COTTAGE INDUSTRIES: This combines in greater or smaller degree the characteristics of both handicrafts and small scale industry. It has been defined as 'one which is carried on wholly with the help of members of the family, either as a whole or part time occupation²'. Thus, the principal feature of cottage industry is that it is carried on in the producer's home, while small scale industry normally, and handicrafts not frequently are run on a workshop basis. This does not, however, preclude cottage industry from adopting the technical or organisational methods of handicrafts and small scale industries.

Among those which are today classified as 'Cottage' industries, two distinct types, displaying distinctly individual characteristics, could be discerned. On the one hand we have industries which are known for their exclusive reliance on manual operations depending mainly if not exclusively on family labour and utility as a complementary vocation to agriculture and supplementing the total income of the agricultural families in the main. Instances of hand-spinning, bee-keeping, hand-pounding of rice, the 'atta chakki' or hand-grinding of

Cooperation. Geneva, 1951, Introduction, p.4 (also quoted by Farooque, *op. cit.*, pp. 16, 17).

2. This definition was adopted by the Third Session of L.C.A.F.E. held at Bangkok and the Fiscal Commission of India, 1949-50.

flour, sericulture, may be quoted in this respect. The point of importance here is that primarily they are the subsidiary means of livelihood of the families undertaking these industries.

On the other hand, there are industrial avocations which of late are designated by the term 'cottage industries' but which basically differ in essence from the above. The important characteristic features distinguishing them with other forms of organisations can be summed up as follows:

1. They constitute invariably the principal means of livelihood of the artisans following them;
2. They mainly depend on the utility value of their products rather than the artistic or sentimental consideration;
3. They need not entirely depend on family labour but may also employ outside hired labour;
4. They need not necessarily be located in the dwelling places of the artisans concerned but may be housed separately;
5. The skill and the training involved in these industries can be acquired through institutions other than those of 'traditional inheritance' without impairing the quality of the product or efficiency of operation, unlike those of artistic handicrafts, and

6. These have potentialities of being run by electricity and other power driven machinery and can be re-oriented into small scale organised units.

Small-scale and cottage industries are often classified as 'rural' and 'urban' respectively, although the types of goods produced by both classes are very often similar, and other methods of classification might be evolved in connection with a more widespread geographical distribution of industry. Cottage industries might be associated with agriculture as they provide whole-time occupation in rural areas, while small scale industries provide whole time occupation in urban and sub-urban areas. No definition can, however, avoid overlapping as there is no clear line of demarcation between small scale industries.¹

To sum up the discussion it can be said that there is no hard and fast rule to define cottage and small scale industries. Hence, for purposes of this study all village and small-scale industries working in the rural areas are covered under the general term of Rural Industries.

Now I turn to discuss the programme followed during the Plans periods regarding the development of rural industries

1. Baroque, C.H., *op.cit.*, p. 15.

to underline the impact of cooperative farming, on the development of rural industries and their place in our economy.

FIRST PLAN

The First Plan of India laid down an extensive programme for village industries prepared primarily with the object of increasing rural employment. The programme covered the following industries: Khadi, Coir, Village oil, Matches, Leather, Hand-made paper, Gur and Khandsari, Palm gur, Woolen blankets and Ice-keeping. Two steps were taken during the plan for the development of these industries, viz., allocation of substantial finances for the development of village and small industries and the building up of a network of All-India Boards and Commission to deal with the problems of handloom industry, Khadi and village industries, handicrafts, small scale industries, sericulture and coir industry. The Government has further helped these industries by encouraging the establishment of emporia and sales depots for handloom, handicrafts and village industries and accepting that "certain classes of stores should be reserved exclusively for purchase from village and small industries and that price differential should be allowed to them over the products of large scale industries."¹

1. For details see : First Five Year Plan.

As a result of it a number of village industries came into existence. The handlooms included in the cooperative fold increased from 6,26,199 in 1950-51 to 88,664 in 1953-54 and to 8,78,894 in 1954-55. They were expected to reach a million by the end of the first Plan.¹ For achieving the targets laid down in the village plan the small scale industries were encouraged by providing financial help as is indicated by the following table:

TABLE-1
Expenditure on village and small industries in
the First Plan (under different schemes)

	1951-55	1955-56 (Budget)	1951-56
Handloom	6.5	4.6	11.1
Khadi	4.9	3.5	8.4
Village industries	1.1	3.0	4.1
Small-scale industries	2.0	3.2	5.2
Handicrafts	0.4	0.6	1.0
Silk and sericulture	0.8	0.5	1.3
Cair	-	0.1	0.1
=====			

SOURCE: Second Five Year Plan, p. 440.

1. Second Five Year Plan, pp. 435, 436.

In the initial stage of development of these industries this expenditure proved effective for preparing a base for the development of these industries. As a result, general progress was witnessed. However, the handloom and khadi industries made comparatively better progress than other industries during the period. In the absence of any programme for developing rural industries on cooperative farms under cooperative sector, the organisation of rural industries on cooperative farms was not undertaken.

SECOND PLAN

During the Plan the primary object of developing village and small industries in rural areas was to extend work opportunities, raise incomes and standards of living and to bring about a more balanced and integrated rural economy. The village and small industries sector was viewed as a progressive and decentralised sector which was closely integrated on the one hand with agriculture and on the other with large scale industry.

Programmes for the Second Plan and problems connected with their implementation were reviewed by the Village and Small Scale Industries (Second Five Year Plan) Committee, commonly known as the Karve Committee,

which was appointed by the Planning Commission in June 1955. This Committee suggested certain measures keeping in view three principal aims namely:

1. To avoid as far as possible during the period of Second Plan, **further** technological unemployment such as occurs specially in the traditional village industries.
2. To provide for as large a measure of increased employment as possible during the Plan period through different village and small industries: and
3. To provide the basis for the structure of an essentially decentralised society and also for progressive economic development at a fairly rapid rate.

The Committee , however, envisaged that even in the traditional village industries, to the extent immediately possible, technical improvements should be adopted, and constantly improved. To achieve this end it was suggested that the future capital investment should be made in improved equipment.

The Second Plan envisaged an increasing role of industrial cooperatives in the national economy and felt that "a combination of factors was required to establish, maintain and develop these industries. Thus, emphasis was laid on providing marketing facili-

ties, technical guidance and financial assistance, etc."¹ The following expenditure was proposed for the Second Plan.

TABLE-2
Expenditure on Village & Small Industries
In the Second Plan*

Industry	(Rs. in crores)	
	Centre	State
Handloom	1.5	58.0
Khadi and Village Industries	4.0	51.5
Handicrafts	3.0	6.0
Small Scale Industries	10.0	45.0
Sericulture	0.2	4.8
Coir Spinning and Weaving	0.3	0.7
General Schemes	6.0	9.0
Total	25.0	175.0

SOURCE: Second Five Year Plan, p. 442.

* The industrial cooperatives were also eligible for financial assistance under this programme.

It shows that about 1/4 of the total expenditure was envisaged for the village industries for which the break up was as follows:

1. For details see: Second Five Year Plan.

TABLE-3

Industry	Rs. crores
Hand pounding of rice	5.7
Vegetable Oil	6.7
Leather Footwear and Tanning (village)	5.0
Gur and Khandsari	7.0
Cottage Match	1.1
Other village industries	14.0
	<u>38.8</u>
=====	

In this way the village industries which were developed during the Second Plan were Hand pounding of rice, Vegetable oil, Leather foot-wear and tanning, Gur and Khandsari and Cottage match. In addition to it, schemes for the development of industries like Hand-made paper, Palm gur, Soap making and Pottery were also undertaken on a large scale.¹ Industries falling under the group of small scale industries were urban and semi-urban in their nature. They were run by small entrepreneurs of self supporting workers and sometimes by cooperatives.

The industrial cooperatives were encouraged during the Second Plan under different schemes. In order

1. Second Five-Year Plan, p. 446.

to strengthen them a working group was appointed in 1957 so that policies regarding the further development may be formulated. This working group submitted its report in 1958. It recommended for the conversion of proprietary concerns into industrial cooperatives and providing loans and subsidies as well as equipments for their development (Appendix L).

This helped the industrial cooperatives in many ways. As a result of the financial and other assistance provided to industrial cooperatives under the programme for the development of cottage and small industries of India, the number of industrial cooperatives increased from 35,250 in 1961 to 35,700 at the end of June 1962.¹ During this period the membership increased from 25.57 to 26.32 lakh and the working capital from 49.5 crores to Rs. 51.57 crores.

In short, the village and small scale industries made a headway during the First and Second Plans under different schemes in realizing the objectives of expanded employment, larger production and more equitable distribution. The over-all progress can be reviewed from the following:

1. The Third Plan Mid Term Appraisal, 1963, Planning Commission, Government of India, p. 114.

Village Industries Sector

		1964-65			1965-66		
		Employment (000) (a)			Employment (000) (b)		
		Wages			Wages		
		Full-time Part-time: (Rs. Crores)			Full-time : Part-time (Rs. Crores)		
1	2	3	4	5	6	7	8
1.	Processing of Cereals and pulses	7.6	39.1	0.19	10.2	45.9	0.20
2.	Village oil	23.7	11.4	2.15	22.3	12.3	1.94
3.	Village leather	21.1	8.9	0.51	10.8	10.0	0.65
4.	Cottage match	0.3	0.6	0.01	0.4	1.6	0.03
5.	Gur and Khandsari	74.3(c)	-	1.20	91.0(c)	-	1.76
6.	Palm-gur	-	304.0	4.72	-	365.4	3.64
7.	Non-edible oils and soap	1.6	10.8	0.12	2.2	9.6	0.18(d)
8.	Handmade Paper	3.5	0.9	0.12	3.8	0.7	0.14
9.	Bee-keeping	1.1	65.9	-	1.2	74.5	-
10.	Village pottery	11.2	10.4	0.61	15.4	9.9	0.0

..Contd.

TABLE Contd.

6 1	2	3	4	5	6	7	8
11 Fibre		9.7	12.9	0.59	11.0	11.3	0.45
12 Carpentry and black-smithy		1.0	0.1	0.03	1.7	1.7	0.12
13 Lime manufacture		1.4	1.5	0.05	1.7	3.1	0.07
TOTAL		156.5	466.5	10.30	171.7	546.0	9.85

(a) Excludes casual labour 78,000 employed in various village industries.

(b) Excludes casual employment of 8,084 persons in village oil, handmade paper and 1,57,944 persons engaged in non-edible oil seed collection which provides casual employment.

(c) Includes full-time and part-time employment for which break-up is not available.

(d) Excludes Rs. 0.44 crores of wages distribution, for non-edible oil seed collection.

SOURCE: Cooperative Development in India (1961-62 to 1965-66), NCUI, New Delhi, p.61.

The production of handloom cloth increased from about 742 million yards in 1950-51 to about 1,900 million yards in 1960-61. Fuller employment was provided for nearly 3 million weavers. The number of looms in the cooperative fold increased from less than 7,00,000 in 1953 to nearly 1.3 million by the middle of 1960. Production of traditional khadi (cotton, silk and wool^{len}) increased from 7 million yards in 1950-51 to about 48 million yards in 1960-61 and that of Ambar Khadi (Produced from the admixture of Ambar Yarn and ordinary charkha yarn) increased from 1.9 million yards in 1956-57 to about 26 million yards in 1960-61. Additional employment, mainly part-time, was provided by these programmes to nearly 1.4 million spinners, besides whole-time employment to about 1.9 lakh weavers, carpenters etc.

Village industry programmes in the Second Plan provided partial relief to about 5 lakh artisans and under-employed women workers in villages. An intensive area scheme was also undertaken during the Second Plan which aimed at intensive development of Khadi and Village industries as part of a larger effort for developing an integrated rural economy. Production of raw silk rose from 2.5 million lbs. in 1951 to 36 million lbs. in 1960. At the end of the Second Plan period, it was reckoned that the industry provided part-time employment

to about 2.7 million persons, besides full-time employment to about 35,000 persons. In handicrafts, there was an increase in internal sales as well as exports. It is estimated that handicrafts including carpets valued worth over Rs. 6 crores per annum were exported during the last three years of the Second Plan period.

Many small scale industries, notably machine tools sewing machines, electric fans and motors, bicycles, builders hardware and hand tools, expanded considerably during the Second Plan. The number of Industrial Estates rose to 60 in 1960-61 of which 52 having about 1,035 factory sheds and employing about 13,000 persons were actually functioning. The programme for small scale industries as a whole is estimated to have provided full-time employment to about 3 lakh persons.¹ However, the development of rural industries on cooperative farms was not encouraged during this period in an organised way.

THIRD PLAN

The programme for the development of village and small industries under the Third Plan envisaged a considerably enlarged scale of effort for increasing employment opportunities, enhancing production through adoption of improved techniques and dispersal of industries in

1. Third Five-Year Plan, Summary, Government of India, Planning Commission, New Delhi, pp. 112-113.

small towns and rural areas. The objectives kept in view during the Third Plan were: firstly to improve the productivity of the workers and reduce production costs by placing relatively greater emphasis on various forms of assistance, such as improvement of skill, supply of technical advice, better equipment and credit, etc. Secondly, to reduce progressively the role of subsidies, scale rebates and sheltered markets, Thirdly, to promote the growth of industries in rural and small towns. Fourthly, to promote the development of small scale industries as ancillaries to large industries, and fifthly to organise artisans and craftsmen on cooperative lines.

To achieve this aim more training and credit facilities were provided. More emphasis was laid on encouraging industries in the rural areas, small towns and less developed areas having a marked industrial potential. It was also proposed to link up the production of small scale units with those of large industrial projects. In the field of industrial cooperatives the plan emphasised the need for consolidation, organisation and financial help to the existing cooperatives. The plan proposed to take steps for providing financial assistance to cover expenditures on managerial and supervisory

staff for a limited period and subsidisation of interest charged by the Central Cooperative financing agencies to the primary societies etc.

For the achievements of these objects the Plan provided as follows:

TABLE-5

Industry	Second Plan Estimated expendi- ture.	Third Plan Outlays		
		State & U/Ts.	Centre	Total
Handloom industry	29.7	31.3	3.0	34.0
Powerloom in the handloom sector	2.0	--	4.0	4.0
Khadi-traditional)	82.4	3.4	37.0	92.4
Ambar)			32.0	
Village industries)			20.0	
Sericulture	3.1	5.5	1.5	7.0
Coir industry	2.0	2.4	0.6	3.2
Handicrafts	4.8	6.1	2.5	8.6
Small scale industries	44.4	62.6	22.0	84.6
Industrial Estates	11.6	30.2	--	30.2
Total		141.2	122.8	264.0

SOURCE: Third Five Year Plan, p. 116

* Outlay anticipated is of the order of Rs. 175 crores.

In addition to the outlay indicated above, there was a provision of about 20 crores for the development of these industries under various other programmes.

With this financial provision it was expected to revitalise the work^{as} cooperatives and organise 300 gram ekais each covering a village or group of villages having a population of 5,000 each. A distinct feature of the programme was the preparation of local plans for the maximum exploitation of available resources for local use. The Khadi and Village Industries Commission also prepared programme for the village industries, like hand-pounding of paddy, oil seeds crushing, tanning and leather, match, gur and khandsari, bee-keeping, palm gur, hand made paper etc. It was proposed to set up 300 new industrial estates of varying size and types and develop sericulture, coir industry, handicrafts and small scale industries.

As a result, the village and small-scale industries sector covered a wide range of industries during this period. On the basis of the total expenditure incurred during the Third Plan period on the development of small industries including the investment from private sources, it has been estimated that part-time and full employment was provided for about 8 million persons, and additional whole-time employment for about 6.3 lakh persons. During the period 1960 to 1965, production of cloth by the handloom and powerlooms is estimated to have increased from 2,013 million metres to 3,056

million metres, khadi from about 59 million kilograms to 2.15 million kilograms. Besides the new items taken up in the small scale sector to step up production of as much as 25-50 per cent was recorded in several small scale industries. Since the inception of the scheme in 1957 for supplying machines on hire-purchase terms to small industries, nearly 16,000 machines, valued at Rs. 24.37 crores were delivered by the National Small Industries Corporation up to 1965-66. By March 1965, 154 industrial estates had started functioning, providing accommodation in about 3.135 sheds to 2,585 units, with an annual out-turn of about Rs. 60 crores worth of products of providing employment to nearly 46,000 persons. The value of purchases by the Central Government Departments from small industries had increased from Rs. 6.5 crores in 1960-61 to Rs. 21.94 crores in 1965-66. Information about the exports of the products of small scale industries is not separately available, although there is evidence that this sector has made significant contribution in several lines. For certain commodities in this sector for which separate information is available, there was a sizeable increase in the exports. The value of the exports of handicrafts, coir, handlooms and silk products increased from about Rs. 25 crores in 1960-61 to nearly Rs. 54 crores in 1965-66.

The number of industrial cooperative societies increased from 7,105 with a membership of 0.8 million in 1951 to about 46,000 with a membership of 3 million in 1963-64. Including the cooperatives engaged in khadi and village industries and also industrial cooperative banks, the total number of industrial cooperatives in 1964-65 was estimated at about 51,000 with a membership of 3.2 million. This is because of considerable progress made in providing credit facilities to small industries from institutional agencies. The credit limits sanctioned to them was increased ^{to} Rs. 70.33 crores by March 1966. Under the credit guarantee Rs. 97.42 crores were issued by January 1966, as against about Rs. 2 crores in April, 1961. In pursuance of the recommendations of the Rural Industries Planning Committee which was constituted in April 1962, 45 Rural Industries Projects have been taken up in selected rural areas. According to a recent review, nearly 1,450 new units had been set up in these project areas up to 1964-65. Recently, 4 more projects have been taken up in the vicinity of large-scale industrial complexes of Ranchi, Durgapur, Bhadravati and Bhilai.

In order to accelerate the progress of developing agro-industries on cooperative farms the Khadi and Village Industries Commission sanctioned grant for meeting the

managerial expenses of these industries (Appendix M) and prepared a scheme for their development under the Khadi and Village Industries programme. This favourably affected the progress of agro-industries on cooperative farms. A number of industries which were within the purview of the Commission were developed. The Government appointed a working group on industrial cooperatives in 1962 for suggesting means to strengthen industrial cooperatives (Appendix N). The National Advisory Board on Cooperative Farming also emphasised on the development of industries on cooperative farms in 1963. But due to the weak structure of cooperative farming societies, lack of initiative by members, complicated procedure of granting loan by the Khadi and Village Industries Commission, non-availability of raw material and technical hands, the cooperative farms could ^{not} develop agro-industries.

The year-wise progress of small scale industries in the cooperative sector has been as follows:

TABLE-6

Year	Number
1960-61	265
1965-66	468
1966-67	461
1967-68	479
1968-69	497

SOURCE: Compiled by the author.

FOURTH PLAN:

During Fourth Five Year Plan the village and small industries sector covered a wide range of traditional and modern small scale industries including Handloom, Khadi Power Loom, Sericulture, Coir, Handicrafts, Village Industries and Mechanised Small Scale Industries with a capital investment of about Rs. 7.5 lakhs in plant and machinery and Rs. 10 lakhs in the case of ancillary units manufacturing parts and components. In the „Fourth Plan tentative list of industries where the entire or bulk of production can be reserved for the small sector was also prepared. This plan laid down the following aims to introduce viability in the cottage and small scale industries in accordance with the industrial policy resolution.

1. Promotion of decentralised growth of industries;
2. Raising the earnings of those engaged in small industries by providing positive forms of assistance for improving their skills and productivity and
3. Organising artisans and craftsmen on cooperative lines.

The Plan envisaged that a more vigorous programme for the development of rural industries including agro-industries which would cover not only those industries which are concerned with the processing of

agricultural products including animal husbandry, horticulture and poultry, but also the manufacture of inputs required for agricultural production like agricultural implements.¹ A number of Rural Industries Project were taken up for intensive development of industries based on agriculture and other local resources. Another important step for accelerating the programme of rural industrialisation and development of agro-industries was to identify the 'growth centres' in small towns and rural areas where basic facilities such as electricity, large supply of agricultural raw materials and improved means of transport were available to provide in an integrated manner the necessary assistance for credit, technical advice and service facilities for building up of clusters of successful centres.

INDUSTRIAL COOPERATIVES

The origin of industrial cooperatives dates back to 1912 when the Cooperative Societies Act of 1912 was passed. But during the period 1912-1939 the organisation of industries on cooperative basis was not encouraged. However, during Second World War some industrial cooperatives came into existence. But it was only after independence that measures were taken to start industrial cooperatives as a means of providing employment to agriculturists and helping the weaker sections of the society.

Now the industrial cooperatives constitute an important sector of the cooperative movement in India. They stand next to agricultural cooperatives in number. The Industrial Policy Resolution of 1948 recognised the importance of giving a 'distinctly cooperatives bias' to cottage and small scale industries. This was suppor-

1. Fourth Five Year Plan, (Draft Outline), p. 241.

ted by the directive principles of the Constitution of India and the 1956 Industrial policy Resolution which laid down the foundation for the steady growth of Industrial Cooperatives in India. In the Five Year Plans of India increasing importance has thus been given to the Industrial Cooperative Societies. As a result of it the various All-India Boards, Commissions and Agencies provided a specialised care and guidance to the needs of cooperative industries. These industries have a significant mark in the field of agriculture, small industry and processing industry. The pace of development was accelerated after the declaration of industrial policy resolution of 1956 which gave accent and incentive to cooperative activities in the field of industrial development. An important land mark in the development of industrial cooperatives was made after the acceptance of various recommendations of the First and Second working groups on Industrial Cooperatives (Appendix N). The Finances were strengthened and the credit guarantee scheme which was in operation since July 1960 was further liberalised so as to include all the central cooperative banks and licenced primary cooperative banks in addition to the State Cooperative Banks. The details regarding gurantees issued to the Industrial Cooperatives since January 1965 are as follows :

TABLE - 7

Period	No. of societies guaranteed	Total limit sanctioned in rupees
1.1.1965 to 31.12.1965	31	9,20,533.00
1.1.1966 to 30. 6.1966	10	4,86,000.00
1.7.1966 to 31. 9.1966	10	1,70,400.00
1.9.1966 to 31.12.1966	11	3,01,500.00
1.1.1967 to 31. 3.1967	5	1,35,000.00

SOURCE: Cooperative Development in India (1961-62 to 1965-66), NCUI, New Delhi, p. 25.

The State Bank of India has also provided working capital finance to industrial cooperatives. By 30th September, 1966, this Bank provided working capital limits to 75 societies the total limits being Rs. 50,26,000.00 and outstanding Rs. 22,25,000.00. The State Bank has also financed industrial cooperatives in Andhra Pradesh, Bihar, Madhya Pradesh, West Bengal, Union Territories of Pondicherry and Delhi. It has also undertaken financing of the Panchayat Industrial Cooperatives in Orissa. The financing of the industrial cooperatives at Ludhiana, Jullundur, Amritsar, Jagadhari and Faridabad by the bank, on a pilot basis was also undertaken. Recently the bank has made elaborate plans for financing rural industries.

The State Financial Corporations have also financed industrial corporations in Assam, Gujarat, Madhya Pradesh, Maharashtra, Orissa, Punjab and Uttar Pradesh and sanctioned loans to 99 societies. The total amount advanced by them was Rs. 28,71,000. The Maharashtra State Financial Corporation later advanced an amount of Rs. 33,29,499 to seven cooperative societies.

The Reserve Bank of India stepped up loans and advances to State Cooperative Bank for financing handloom industries. The position on 30th June, 1967, was as follows:¹

- | | |
|--|----------------------|
| (a) Amount outstanding at the end of the month (at concessional rate of interest). | ... Rs. 449.57 Lakhs |
| (b) Amount outstanding at the end of the month at 1½% below bank rate. | ... Rs. 17.0 Lakhs |

In 1965 a special group of financing of industrial cooperatives by cooperative banks was set up by the Ministry of Industry in June, 1966 which was followed by another working Group set up by the Reserve Bank of India in 1967 (Appendix D).

1. Cooperative Development in India (1961-62 to 1965-66). New Delhi, pp. 26-27.

In order to help the development of societies in the industrial sector the National Federation of Industrial Cooperatives was established in 1966. Moreover, the National Cooperative Union of India has elaborated training and education programme for industrial cooperatives.

At present the largest number of industrial cooperatives organised in India are working under khadi and village industries sector. In March 1966, there were 1,300 khadi cooperatives and 18,071 village industries cooperatives. Of these, 78 Khadi cooperatives and 683 village industries cooperatives were registered during 1965-66. Besides khadi, the Khadi and Village Industries Commission is in charge of 21 village industries,* viz.: (1) processing of cereals and pulses, (2) Ghani oil, (3) village leather, (4) cottage match, (5) gurmhandsari, (6) palmgur, (7) non-edible oils and soap, (8) handmade paper, (9) village pottery, (10) bee-keeping, (11) fibre, (12) black-smithy and carpentry, (13) gobar gas, (14) limestone and its products, (15) manufacture of shellac, (16) collection of forest plants and fruits for medical purposes, (17) fruit processing and preservation, (18) bamboo and cane work, (19) manufacture of household utensils from aluminium, (20) manufacture of gum resins, and (21) manufacture of katha.

*Cooperative Development of India (1961-62 to 1965-66)
NCUI, New Delhi, p.30.

As a result of the efforts made by the Commission on streamlining the production apparatus and organisational efficiency of the cooperative, the cooperative societies have progressed. For example, the production per rupee of net investment has increased to Rs. 9.63 in the Third Plan as compared to Rs. 6.92 in the Second Plan. Similarly, the per capita disbursement has gone up from Rs. 831 in the Second Plan to Rs. 833 in the Third Plan. The value added by these industries has also witnessed an increase. The per capita value added improved from the figure of Rs. 658 in the Second Plan to Rs. 1,202 in the Third Plan. The effect of all these things has been quite noticeable in the per capita wages which have gone up from Rs. 411 in the Second Plan to Rs. 729 in the Third Plan.

In the Fourth Plan a total outlay of over Rs. 290 crores ~~has been~~ made in the public sector for the development of different small industries. Against this the expenditure is estimated at about 250 crores. The break up of these figures for different ~~small~~ industries in the Central and State Sectors is given below:

TABLE-8
OUTLAY & EXPENDITURE IN THE
FOURTH PLAN

(Rs. crores)					
	Fourth Plan			States & Union Territories	
	Central & Centrally sponsored		Estima- ted Ex- pendi- ture	Outlays	Estima- ted Ex- penditure
	Origi- nal	Reappr- aised			
1. Small Scale Industries.	37.65	27.33	15.09	67.02	55.24
2. Industrial Estates	-	-	-	18.03	15.73
3. Khadi and Village Industries	95.00	111.00	99.55	1.56	3.11
4. Handloom Industry)	4.50	1.10	0.64	26.48	28.57
5. Power Looms)				7.67	3.26
6. Sericulture	2.00	1.30	0.94	7.94	7.45
7. Coir Industry	1.50	1.00	0.78	3.51	3.71
8. Handicrafts	8.00	2.60	1.29	5.49	4.95
9. Rural Industries ¹ . Projects	4.50	9.00	10.13	-	-
10. Collection of ¹ . Statistics	0.60	0.60	0.57	-	-
TOTAL	153.75	153.93	128.99	138.36*	122.02

1. Centrally-sponsored schemes.

* Includes Rs. 0.66 crore for Uttarakhand and Ladakh.

SOURCE: Draft Fifth Five Year Plan 1974-79, Volume II, Government of India, Planning Commission, New Delhi, p. 161.

Additional outlays were made at the Centre for special schemes to assist the educated unemployed to set up small industrial and service units. Although the utilisation of the Plan outlays in the State and Union Territories is expected to be higher, the position varied from State to State, as given below:

TABLE-9
VILLAGE & SMALL INDUSTRIES

State Union Territory	(Rs. lakhs)	
	Fourth Plan Approved Outlay	Estimated Expenditure
I STATES:		
1. Andhra Pradesh	850	541
2. Assam	576.	494
3. Bihar	700	646
4. Gujarat	298	.310
5. Haryana	500	354
6. Himachal Pradesh	200	221
7. Jammu & Kashmir	385	270
8. Karnataka	500	721
9. Kerala	1043	1011
10. Madhya Pradesh	537	506
11. Maharashtra	750	1086
12. Manipur	71	131

...contd

TABLE...Contd

State Union Territory	Fourth Plan	
	Approved Outlay	Estimated Expenditure
13. Meghalaya	125	88
14. Nagaland	66	62
15. Orissa	322	326
16. Punjab	850	522
17. Rajasthan	87	115
18. Tamil Nadu	2500	2057
19. Tripura	112	81
20. Uttar Pradesh	2010*	1441
21. West Bengal	614	576
Total	13096	11549
II UNION TERRITORIES		
22. Andaman & Nicobar	5	4
23. Arunachal Pradesh	45	45
24. Chandigarh	28	39
25. Dadra & Nagar Haveli	10	2
26. Delhi	475	412
27. Goa, Daman & Diu	57	76
28. Lakshadweep	4	3
29. Mizoram	@	30
30. Pondicherry	50	40
Total	674	651
GRAND TOTAL	13836	12200

* Includes Rs. 66 lakhs for Uttarkhand and Ladakh.

@ Include in Assam.

SOURCE: Draft Fifth Five Year Plan, 1974-79, Volume II, Government of India, Planning Commission, New Delhi, p. 170.

In addition to the outlay in the public sector the commercial banks have extended credit to small industries to the tune of Rs. 645 crores by December 1972. The State Financial Corporations have advanced about Rs. 21 crores in 1971-72 and the National Small Industries Corporation has financed to the extent of Rs. 20.8 crores by 1971-72.

The village industries assisted by the Khadi & village industries commission have made progress. Their total production during 1972-73 was worth Rs. 101.8 crores and the sales amounted to Rs. 74.31 crores. About 11.9 lakhs persons were employed by these industries.

The power-loom increased to 2.9 lakhs by the end of April 1972. Likewise the Sericulture has made progress in increasing the yield of mulberry per acre, supply of disease free layings and the improvement of reeling equipment. In 1969-70 the total export was worth Rs. 18 crores which fell down to Rs. 9 crores in 1972-73 due to sharp fall in the exports of silk scarves. Still the industry continued to provide employment, both part time and full time, to over 30 lakh persons. The coir industry has not witnessed a satisfactory progress though it continued to provide part time employment to about 5 lakh persons mainly in

Kerala. A special scheme for reconstructing the co-operative Coir Industry was taken up during the plan. The handicrafts continued a successful career and the sales rose to 6.5 crores in 1971-72. It employed about 14 lakh craftsmen both on part time and full time basis. The Rural Industries projects have also achieved success. A number of existing units were assisted as well as new units were set up during the plan period. The estimated gross value of production of the assisted units increased from about Rs. 22 crores in 1969-70 to Rs. 34 crores in 1971-72. Employment has also increased from 1.16 lakh to 1.47 lakh person during this period. By now the coverage of the existing projects has been extended and preliminary work for starting 57 new projects in the Fifth Plan has been taken up.

In short, the progress made by a number of industries during Fourth Plan has been rapid in terms of creating full and part time employment, increasing number of units, range of production and value of export. However, the pace of growth has been uneven in different states.¹ The plan has, however, not been successful in improving the skill and production techniques. In the field of agro-based industries

1. For details see Fifth Plan, Government of India, Planning Commission, New Delhi, p. 160

the progress is far from being satisfactory. It was expected that rural industries will be promoted in urban and semi urban areas during Fourth Plan, but a satisfactory progress has not been made in this regard. The industrial cooperatives have suffered a set back due to shortage of raw materials, credit facilities, marketing problems etc.. Measures like increase in the allocations of imported and indigenous raw materials in short supply, reservation of certain items for this sector, concessional finances, transport subsidies, survey of industrial cooperatives, special facilities for educated and technically qualified persons to set up small units have helped the industrial growth in village and small scale industries but much is left to be done to accelerate the tempo of rural development. The industrial cooperatives deserve a special place in the future development programme of the country to provide employment and increase income of marginal farmers and cooperative farms.

FIFTH PLAN:*

The principal objective of the programme under this plan is to facilitate the attainment of some of the major tasks for the removal of poverty and inequality in consumption standards of these persons through

* For details regarding Village & Small Industries during Fifth Plan, see Appendix 'P'.

creation of large scale opportunities for fuller and additional productive employment and improvement of their skills so as to improve their level of earnings. Taking¹ into account the shortcomings in implementation of the programmes during the Fourth Plan period and the recommendations of the Task Forces set up in connection with the formulation of the programmes for these industries, the broad strategy of the programmes will be to:

- i). develop and promote entrepreneurship and provide a 'package of consultancy services' so as to generate maximum opportunities for employment, particularly self-employment.
- ii). facilitate fuller utilisation of the skills and equipment of the persons already engaged in different small industries,
- iii). progressively improve the production techniques of these industries so as to bring them to a viable level, and
- iv). promote these industries in selected 'growth centres' in semi-urban and rural areas including backward areas.

It is evident from the above discussion that the village industrial cooperatives have made a headway during the five years plans. They are providing gainful employment (full-time and part-time) and have helped in increasing the per capita income. As these industries are organised in the villages, the village economy

1. Draft Fifth Five Year Plan, 1974-79, Volume II, Government of India, Planning Commission, New Delhi, p. 164.

is benefited by their progress. But they are not necessarily established on cooperative farms as a part of their business. A few cooperative farms have established such industries. Thus, it can be concluded that the development of rural industries under cooperative programme and others have no direct relation with the development of cooperative farming societies and vice versa. As the development of cooperative farming societies creates conditions for the development of ancillary industries on farm, it is necessary to formulate a well coordinated programme for the development of agro-industries on these farms. The Fourth Plan promises for the development of agro-industries on cooperative farms have not been carried out by the state governments and financing agencies with due care. It is recommended that every genuine cooperative farming society should be provided financial help under cooperative plans for the development of these industries after its successful existence for about two years. The finance should be supplemented by the Cooperative Bank and other schemes of the cooperative department as well as other agencies. It is desirable to increase credit facilities in case of agro-based industries started on cooperative farms.

CONCLUSION

It has been noted that the range of activities of rural industries which can be developed in cooperative farms is immense but their potentialities have not been properly developed. During the period 1951-72 the number of small scale and village industries was considerably increased in the rural area but their progress was not satisfactory on cooperative farms due to lack of finances, technical know-how, non-availability of modern tools and designs and difficulties in marketing. No wonder their productivity was generally low. They were developed under Khadi and Village Industries and Cooperative and Industrial sectors of the State. No integrated programme was, however, undertaken by cooperative farming societies. To diversify employment opportunities the development of agro-industries by cooperative farming societies were not encouraged under a well-defined programme and the recommendations made by various committees for their healthy and rapid growth were ignored. In this manner the promises of the Third Plan and efforts made during Fourth Plan for the development of agro-industries as a part of the cooperative farming programme have failed to bring about the desired goals.

A few industries, like poultry, dairy and piggery have been encouraged on the recommendations of the National Cooperative Farming Advisory Board. The Fourth Plan has envisaged the development of agro-industries on cooperative farms for increasing their income and providing employment opportunities during slack period but a few farms have been benefited under this plan.

In the draft fifth five year plan programmes for the removal of poverty and inequality in the consumption have been made through productive employment by promoting industries in semi-urban and urban areas, but it is too early to comment on it. With this background the next chapter deals with the problems & prospects of rural industries in Uttar Pradesh.

CHAPTER VI

PROBLEMS AND PROSPECTS OF RURAL INDUSTRIES IN UTTAR PRADESH

It has been pointed out in the last chapter that the prospects of rural industries in India are great and good but they have failed to revitalise the economy in spite of Government help during the five year plans. In this chapter a thorough analysis of Uttar Pradesh's economy in relation to the development of rural industries is made.

In spite of more than two decades of Planning, Uttar Pradesh is a backward state. If we measure it from the yard-stick of national income, it is noticed that whereas the national income during the first three plan periods has grown at an average rate of 3.5 per cent per annum, the corresponding rate of growth in U.P., has been below this average and during the Third Plan it has been about 3 per cent only. Thus the per

capita income of the State was not likely to exceed Rs. 255.00 which was less than the national average. As regards the employment, agriculture continues to be the mainstay in U.P. and the dependence of population on agriculture is comparatively higher than the average for the whole of India.

In order to accelerate the economy of U.P., it is necessary to make deliberate efforts for increasing the per capita income of the rural masses. The experience of the developed countries guides us to the fact that agriculture cannot develop without industrial development and vice versa. Agriculture provides raw materials to the industry while industry provides tool and brings about a mental change which enhances agricultural production. But in a country where unemployment, under employment and inadequacy of capital exist side by side one cannot advice for the adoption of Russian pattern of industrialisation under which heavy industries were developed first to bring agricultural revolution through mass collectivisation of agriculture. Thus it is not worth while to start big industries because it cannot attack the problem of unemployment. Moreover, it is not feasible in view of the fact that Uttar Pradesh does not posses basic raw materials like iron ore, crude oil for heavy industries etc. This fact undoubtedly exercises a restraining influence on

the rapid growth of large scale industries in the State and leads us to the conclusion that the strategy of industrialisation in Uttar Pradesh shall have to be somewhat different to that adopted in other States.

On the contrary, Uttar Pradesh has the advantage of a large domestic market. Besides, programmed development in the field of agriculture, forestry and livestock will tend to increase the supply of raw material from these sources which can provide a base for the development of a variety of rural industries having good promises in the field of employment without restraining the financial resources of the State. This will provide wherewithals of agriculture without undermining the development of urban industries which will help in creating skilled artisans, technicians and entrepreneurs for future leadership. The development of cottage and small scale industries and handicrafts etc., is of vital importance as they have the potentiality of increasing employment opportunities, providing work to agriculturists in their idle time and augmenting per capita income.

Because of their importance in the rural economy of the State much importance has been given to the development of these industries in U.P. With the

introduction of cooperative farming the possibilities of their development have further increased. A cooperative farm enlarges the prospects for the development of such industries. The development of rural industries provides subsidiary occupation and supplement income of the farm workers conversely the rural industries have better prospects of development on cooperative farms because of the availability of sincere workers, raw material, technical guidance and presence of cooperative spirit which is necessary for the development of these industries. As a matter of fact the development of cooperative farming should favourably influence the development of rural industries. In the following paragraphs a study of the development of rural industries (cottage and small scale industries) is made to trace their progress since the beginning of the cooperative farming programme to analyse the impact of cooperative farming on rural industrialisation with reference to Uttar Pradesh.

Before I discuss the problems it will be necessary to point out that the small scale and village industries (whether organised on cooperative basis or otherwise) can broadly be classified under the following heads:

1. Small Scale Industries.
2. Village Industries.
3. Handloom
4. Sericulture.
5. Handicrafts

1. SMALL SCALE INDUSTRY

This industry covers a wide field of activity in the State. For example:

- (i) Agro-based industries:
(Wheat milling, Oil crushing, Cotton ginning, Khandsari, etc.)
- (ii) Textiles:
(Cotton, Woolen, Silken, Carpet making, hosiery, etc.)
- (iii) Live-stock based industries:
(Dairies, Tanneries, Leatherweares, etc.)
- (iv) Forest-based industries:
(Saw mills, Plywood, Other wood products, Resins, etc.).
- (v) Mineral-based industries:
(Glass and Glassware, Potteries, Lime-stone dressing, etc.)
- (vi) Chemical industries.
- (vii) Engineering industries:
(Castings, Brassware, Locks, Scientific instruments, Sheet metal work, etc.)
- (viii) Other industries.

2. VILLAGE INDUSTRIES:

Village industries largely provide the essentials for village life. They are also an important means for providing employment to the vast number of unemployed and under employed people essentially engaged in agricultural pursuits. The industries commonly covered in this sector include:

1. Khadi and Ambar Khadi
2. Leather tanning
3. Palm Products
4. Blanket and Hill wool
5. Ghani oil
6. Handmade paper
7. Hand pounding of paddy
8. Soap making with non-edible oils
9. Village pottery
10. Cottage match making
11. Gur-Khandsari
12. Bee-keeping
13. Carpentry and blacksmithy
14. Fibre and methane gas.

The development of village industries is undertaken jointly by the State Government and the Khadi and Village Industries Commission. The Cooperative Department also plays an important part in development of rural industries by giving organisational financial and marketing assistance.

3. HANDLOOM

This industry is also important as a village industry and fulfils all the characteristics associated with an agricultural and rural economy. It is by far the biggest cottage industry in the State. For the expansion of this industry looms of different size can be installed according to the conditions of the area selected. Its development can help in the welfare of the rural masses.

4. SERICULTURE

It is developing industry of the State. The scheme for sericulture was started in the Doom Valley in 1948. Later on it was extended in the districts of Saharanpur, Pauri-Garhwal, Nanital, Etawah and Gorakhpur, Now it also covers : Almora, Tehri-Garhwal, Bijnor and Moradabad.

5. HANDICRAFTS

From time immemorial Uttar Pradesh has been holding a position of pre-eminence in the country on account of the manifestation of artistic excellence in the handicrafts products which earned a great reputation for the craftsmen of this State. These crafts decayed considerably in the absence of patronage during the long alien

rule and now they need revival and restoration to their former position. To achieve this end, emphasis has been laid on their development during planned period.

INDUSTRIAL DEVELOPMENT SCHEMES

For the development of village and small scale industries, a number of schemes were launched in India.¹

The Khadi Development Scheme was launched in 1947 as a post-war reconstruction scheme with the main object of finding means of livelihood for the unemployed masses living in the rural areas of the State. The Blanket development and palm jaggery schemes date back to 1955 and 1948 respectively. The Ambar Charkah scheme was initiated in 1957. Later on the U.P. Khadi and Village Industries Board came into existence in 1960. With the establishment of this Board, the Directorate of Industries, U.P. has been acting as the agency of the Board for implementing the development programme of the Khadi and Village Industries Commission. The funds were so far channelised by the commission through the State Government are now being received through the State Board, which is a statutory body, responsible for the development of the following industries in the State:

1. Development of Industries in Uttar Pradesh (Progress Reviews). 1961-62, Directorate of Industries, U.P., Kanpur, p. 133.

1. Khadi
2. Processing of cereals and pulses
3. Village oil
4. Village leather
5. Cottage match
6. Gur and Khandsari
7. Palm gur
8. Soap making with non-edible oils
9. Hand made paper
10. Village pottery
11. Bee-keeping
12. Fibre
13. Blacksmithy and carpentry
14. Manufacture and use of methane gas from cow dung and other waste products (such as: flesh of dead animals, night soils, etc.)
15. Cottage Industry of limestone and its products.

Industrial cooperative scheme which was assisted by Khadi and Village Industries Commission, Handloom Board, Handicrafts Board, Silk Board and Small Scale Industries Board, etc. made a headway during First and Second Plans. Moreover the Hand made paper, leather tanning, gur development, cottage match, hill wool, handicrafts, handloom, sericulture and sriculture schemes were introduced for developing the economy

of the State. In the following paragraphs the development of rural industries has been discussed in detail.

DEVELOPMENT OF COTTAGE AND SMALL SCALE INDUSTRIES DURING PLANS PERIOD.

The First Plan of the State was implemented primarily for the development of agriculture and certain agricultural material. However, it was admitted that for a balanced economic development of the State it was necessary to develop industries along with agriculture. With this end in view cottage and rural industries were also encouraged during the First Plan and an amount of Rs. 289.54 lakhs was provided for the purpose. To develop handloom industry an amount of Rs. 21.54 lakhs was provided while khadi, gur, hillwool and Blanket Finishing Factory schemes were taken up under the Khadi and Village Industries programme. The work of developing small scale industries like cutlery, pottery, lock, etc. was encouraged for which an amount of Rs. 111.21 lakhs was provided. Moreover, the handicrafts and sericulture schemes were also encouraged.

The achievements made during the programme were not encouraging (Appendix Q). The planned targets were

not achieved in respect of industrial cooperatives. Handloom cloth production, Hill Wool Scheme (Training) and Lock scheme. However, in case of sericulture and chicken embroidery the progress was satisfactory. But with the development of these industries neither enough rural employment potentialities were created nor they could play any significant role in the rural uplift programme. Moreover, the industries were not developed on cooperative farms. Even the Government agencies paid no attention to the problem of encouraging cooperatives to start agro-industries. Unless Government takes initiative, there is little prospect of agro-industries development.¹

SECOND PLAN

At the time of drafting the Second Plan we were faced with the problem of finding employment for a large number of unemployed and under employed persons of the State. With a view to solve this problem it was planned to develop village and small scale industries. An amount of Rs. 1,144.42 lakhs was provided for the development of village and small industries in the following manner:

1. Laxminarayan and Kanugo, Glimpses of Cooperative Farming in India. p. 41.

	Rs. in lakhs
Village and small industries	1,008.38
Industrial Estate and Township	100.00
Industrial Cooperatives	36.04

SOURCE: Second Five Year Plan (A Brief Outline) Government of U.P., Lucknow, 1956, p.23.

Note: After reappraisal this amount was reduced to 9.70 crores while the anticipated outlay during 1959-61 was Rs. 9.31 crores.

As many as 58 different schemes relating to different categories were taken up during the Second Plan. By the end of 1959-60, loans and grants amounting to Rs. 202 lakhs were distributed to industrial co-operative societies. In the 248 training-cum-production centres set up during the second plan as many as 15,800 artisans and craftsmen were trained. Two industrial estates at Agra and Kanpur, three smaller estates in the pilot project areas (Deoband) and Community Development areas of Loni (Meerut) and Kashi Vidhya Pith (Varanasi) were completed. Moreover five more small estates were sanctioned during the Plan for different districts.

A good aspect of the plan was to develop 2,000 active industrial cooperatives by 1961 for which 36.04 lakhs were provided under the Plan. It was expected

that 1,53,000 members of the cooperatives will be benefitted by the scheme.

In short, during First and Second Plans of the State the Handloom, Small Scale Industries, Industrial Estates, Handicrafts, Sericulture, Village Industries and Industrial Cooperatives were encouraged, (Appendix R)¹.

But their impact on rural unemployment and under employment was unsatisfactory. Most of the industries started except those under Khadi and Village Industries and Cooperative sector have created employment potential in the urban areas.

The industries which provided employment opportunities in the rural areas were mostly village oil, soap, hand pounding, pottery, hand made paper and cottage match industries which produced goods worth Rs. 82,75,650.¹⁴ and provided full employment to 8,840 and part time employment to 5,909 persons.² Another feature was the emphasis on the development of already industrially developed and congested cities like Kanpur, Agra and Varansi, Although it was proposed to con-

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1. For details see: Development of Industries in U.P., Progress Review, 1961-62, pp. 183-185.
 2. For details see: Report of the Working Group on Cooperative Farming, Vol. II (U.P), p. 64.

centrate on the development of backward areas of U.P., but little was done for boosting up the economy of such areas by establishing cottage and small scale industries. Moreover, no specific programme was made to develop industries on cooperative farms under the cooperative farming programme started during the second plan. Whatever little help was provided goes to the credit of Khadi and village industries programme of the State. The Khadi and Village Industries Commission undertook experimental work of intensive development and developed some village industries on the cooperative farms.¹ The cottage and village industries suitable for the ~~areas~~ have developed under the guidance of the intensive area office.

However, the growth of industries on cooperative farms was checked because these industries were looked after by the Directorate of Industries which has no sincerity with the ideology of cooperation.

THIRD PLAN

The Third Plan was drafted with a view to accelerate the economy of the State and bridge the gap

1. Development of Industries in U.P.(Progress Review), 1961-62, Directorate of Industries, U.P., Kanpur, p. 204.

between the national and the State average of per capita income by increasing it through agricultural and industrial progress. For the rural industrial development of the State the following provisions were made:

The table No. 1 shows that financial provision made under the head of khadi and village industries was only 0.50 crores. Likewise for the development of sericulture and handicrafts Rs. 0.95 and 0.99 crores respectively were made available under the Plan.¹ This amount was quite insufficient for any effective progress in order to enlarge the employment potentialities through these industries in rural areas. The development of small scale industries and handloom and power loom was greatly emphasised during the period, Some industrial centres were also developed. No doubt the strategy of developing these centres cannot be undermined but in view of the unemployment position it was also necessary to provide more funds for rural industries which were so essential for breaking stagnation of our rural economy. The genuine cooperative farming societies could have easily been selected for providing finances and other requirements necessary

1. See Appendix 5 regarding progress in Organising Industrial Cooperatives.

TABLE — 1

(Rupees in Crores)		
Category	All-India	Uttar Pradesh
1. Handloom and power loom	36	4.28 (excluding central share for power-looms).
2. Small scale industries (including Industrial (Estates)	107	18.26 (Rs. 5.57 industrial Estates and Rs.12.69 for Small Scale Industries.)
3. Handicrafts	8	0.99
4. Sericulture	7	0.95
5. Khadi and Village Industries.	89	0.50 (excluding schemes to be financed by Khadi and village industries commission)
6. Coir	3	...
<hr/>		
Total	250	24.98*
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* Include spill over of Rs. 42.18 lakhs from the Second Plan.

SOURCE: Third Five Year Plan, U.P., p. 91.

for the development of rural industries. However, the then existing cooperative farming societies which numbered 387 at the end of the Second Plan were not examined from this point of view. It was only in 1963

that the matter was considered seriously when the National Cooperative Farming Advisory Board suggested that assistance for starting dairying and poultry should be given to cooperative farming societies in preference to individuals.¹ The Khadi and Village Industries Commission also provided managerial grant over and above the financial assistance under the prescribed patterns of financial assistance during 1963. This has helped in the development of agro-industries on Cooperative Farms. Thus industries like gur, poultry, dairy and hand pounding of rice, bee-keeping, village oil, processing of cereals, etc. developed on cooperative farms. There is ample scope for the development of a number of industries like rope making, toys making, soap making and establishment of repairing shops etc., on the cooperative farms. No steps were, however, taken to develop them. In the absence of statistical data regarding the production of industries run on cooperative farms it is difficult to give any concrete picture of their production potential. Moreover, a number of industries started by the cooperative farming societies are

1. Cooperative Policy and Programmes, Part II, Important Letters and Schemes relating to cooperative development, NCUI, NEW, DELHI, 1964, p. 38 (also see Appendix I).

not registered units. Mostly they do not have their own Balance Sheets. In a number of cases these industries were developed seasonally. However, all this is a pointer to the fact that the industries have not been developed in a planned way under any well thought out and coordinated programme. Thus the aim to provide direct and indirect employment by developing cottage and small scale industries to the extent of 51,88,300 persons (urban and rural areas) as visualised by the plan,¹ also could not be realised during the plan period. Moreover, it was necessary to stimulate the economy of underdeveloped districts by providing more employment opportunities of Eastern Region, Hill Region and Backward Region. The percentage of population depending upon agriculture in eastern district is as high as 82 compared to all India average of 69.8 and U.P. average of 74.2 per cent.² The per capita income in this area is quite low and large number of families live near the subsistence level.

The case study of Basti District conducted by the National Council of Applied Economic Research has brought out the extreme poverty of this depressed area. In the

1. Third Five Year Plan, U.P., p.91.

2. Third Five Year Plan (Vol. I), Government of U.P. p. 96.

hills the density of population^{is} low, but it suffers from non-availability of good agricultural land and acute shortage of manpower. In Bundelkhand region agriculture is difficult and, therefore, it deserves special treatment in the matter of development of industries in order to reduce the pressure of population on land and provide employment to large number of people.¹ These areas have not been given preferential treatment during the Plan. Neither genuine cooperative farming societies were developed in these areas nor any programme for rapid rural industrialisation was initiated. A sum of Rs. 1,244,80 lakhs was proposed for these areas under the development programme of the Backward areas which was distributed among the different regions as given below:

	Rs. in lakhs
Eastern Region	870.82
Hill Region	220.02
Bundelkhand Region	153.96

This amount was negligible for the development of these regions. Their economic prosperity demands a long term programme of development covering all the different aspects of their problems. Development of cooperative farming and agro-industries would have gone a long way in developing the economy of these regions.

1. Third Plan(Vol. I) Government of U.P., p. 96.

But the Government has failed in implementing this programme in backward areas.

In short, Third Plan has not been a success from the point of view of enlarging employment opportunities for rural population. The cooperative farming societies, have not developed agro-industries because the programme of developing these industries was taken up from 1963 and quite a large number of cooperative farming societies were either new or quite small for taking the work of developing the industries. The Government was not keen to develop these industries as the cooperative farming societies were not showing any progress. In the absence of financial help, technical guidance, marketing facilities and electric supply neither it was possible for the cooperative farming societies to develop industries in a short period of their existence nor they were developed.

FOURTH PLAN

The Fourth Plan of Uttar Pradesh recognised the importance of small and village industries in the economic development of the State. The Plan says:¹ that the expansion of the small scale and village industries is

1. Industrial Programme in U.P. during IV Plan, Kanpur, U.P., p. 82.

most desirable in view of their vast employment potential, relatively low unit investment, short gestation period, simple techniques of production, wide dispersal possibilities, easy availability of required machinery and equipment, etc. Thus under the Plan small scale enterprises covering a wide range of industries were proposed to be developed. It was suggested that the programme of small scale industries during the Plan will be integrated with the programmes of agricultural development etc.

The Fourth Plan estimated that having regard to the present state of agriculture in the State and the programme of agriculture development, it is envisaged that there would be a 4 per cent to 5 per cent increase per annum in this sector. Such a growth of the agriculture sector would result in the contribution of this sector to the total State income rising from 1,228 crores in 1965-66 to Rs. 1,500 crores by 1970-71. At the same time this growth of agricultural production would also cause certain increase in the sectors of communication and transport as well as other services.

But in order to increase the total State income from Rs. 2,043 crores in 1965-66 to minimum of Rs. 2,840 cores in 1970-71 at an annual rate of growth of 7 per

cent there would be a gap of around Rs. 200 crores after allowing for the possible contributions by the development of agriculture, transport and communications and other services. This then will have to be covered by the development of the industrial sector in the order given in the following table.

TABLE — 2

STATE INCOME

Percentage Distribution of Total State Income by Industrial Origin (at Constant 1960-61 Prices)

	Agriculture and allied	Mining, Quarrying and large and small scale manufacturing and construction	Commerce, transport and communications.	Other Service	TOTAL
1960-61	60.9	10.2	12.3	16.6	100.0
1961-62	59.6	10.8	12.5	16.1	100.0
1962-63	57.4	11.1	13.3	18.2	100.0
1963-64	55.1	12.1	13.5	19.3	100.0
1964-65	58.5	11.3	12.4	17.8	100.0
1965-66	56.0	11.9	13.2	18.8	100.0
1966-67	59.9	12.7	14.4	20.0	100.0
1967-68	56.3	11.7	13.9	18.1	100.0
1968-69*	56.3	11.5	14.2	18.1	100.0

(*Quick Estimates)

SOURCE: Statistical Diary, 1970, Directorate of Economics and Statistics, U.P. Government.

Thus having regard to the ratios of investment to net output in various sectors derived from past experience of the country as a whole, and keeping in mind the types of industries which can be developed in the State, an increase in total income by Rs. 200 crores through the industrial sector during the Fourth Plan Period, was expected to call for an investment of around Rs. 600 crores as given below:

TABLE — 3

Distribution of Investment in Schemes
in Industrial Sectors

Organised Industries	Rs. in crores
Central Public Sector Schemes	255
Private Public Sector Schemes	52
Private Sector Schemes	217
Small and Village Industries Schemes	76
TOTAL	600

Needless to say that the investment in industries in this State during the past has been of a much lower, order. As a result of it the State has not succeeded in maintaining high tempo. Thus a high investment in Fourth Plan was an urgent necessity for industrial development of the State. Moreover in view of the adverse unemployment position, it was necessary to develop industries having more employment potentials.

Out of this proposed 600.00 crores it was suggested that small and village industries should be allotted 75 crores for creating employment opportunities and gross output so vital for the economic development of the State. It was expected that this investement will increase production and create employment opportunities as given in table No. 4.

TABLE — 4
Proposed Investment and Output During Fourth Plan

GROUP	Total Investment (Rs. in Lakhs)	Foreign Excha- nge requirements (Rs. in Lakhs)	Power Re- quirements (K.W.)	Employ- ment poten- tials	Estimated Gross Output value (Rs. lakhs)
1. Minerals and Ceramics	50.00	1,500	55,000	40,000	3,900
2. Pulp and Paper	50.00	11,600	40,000	4,200	1,900
3. Sugar & Fermentation	40.00	200	8,700	23,000	3,600
4. Chemicals	152.00	5,000	3,50,000	50,000	11,000
5. Engineering	185.00	7,000	2,43,000	51,000	16,500
6. Textile	45.00	1,800	2,34,000	57,000	5,700
7. Miscellaneous	3.00	-	3,300	2,800	900
8. Small & Village Industries	75.00	100	66,000	1,50,000	1,00,000
TOTAL	600.00	1,72,000	10,00,000	3,78,000	5,35,000

SOURCE: Industrial Programme During IV Plan in U.P., p. 87

From this table it can be read that small and village industries will require minimum foreign exchange while they have the potentiality of creating greatest employment opportunities, i.e., more than one third of the total employment opportunities created by investing Rs. 600 crores.

The programme for the development of small and village industries which was proposed to followed during the Plan has been discussed below in detail.

SMALL SCALE INDUSTRIES:

These industries have witnessed progress during the Third Plan and nearly 9,000 small scale units were registered with the Directorate of Industries in 1965. The programme for the development of Industrial Estates also made good progress and it was expected that by 1965-66 they will be manufacturing goods worth nearly Rs. 3 crores per annum and will provide employment to over 5,000 men. During the Fourth Plan the strategy of development was to select a number of growth points where the infra-structure can be provided and Intensive Area Development Schemes can be launched. Thirty such growth points were selected for the next three years

in the expectation that their development will not only ensure employment but will also develop ancillary industries which are essential if large industrial undertakings are to come up in the State. Moreover, the establishment of small scale industries in the backward areas will go a long way towards developing these areas, providing nuclei of enterprenureship, skilled workers etc., on the basis of which large industries can be established in such areas in the near future.

VILLAGE INDUSTRIES:*

It was envisaged that for the development of village industries the State Government and the Khadi and Village Industries Commission¹ will undertake the work jointly. However, the Cooperative Department will also play its part in developing rural industries by giving organisational, financial and marketing assistance.

During the Fourth Plan an investment of about 40 lakhs was proposed on different schemes relating to the development of village industries as follows:²

1. Industrial Programme of of Uttar Pradesh, during IV Plan, p. 87.

2. Ibid.

* See Appendix 'U'

TABLE — 5

Name of Scheme	Proposed Fourth Plan Outlay (Rs. in lakhs)
1. Staff for Village Industries	24.00
2. Khadi Development Scheme	6.61
3. Barrack Blanket Scheme	3.00
4. Hand-made paper	3.39
5. Palm Product Development Scheme	2.20
6. Leather and Tanning Scheme	1.00
TOTAL	40.00

SOURCE: Industrial Programme in U.P. During IV Plan,
Directorate of Industries, U.P., Kanpur, 1965,
p. 87.

Besides the Government Schemes, the All-India Khadi and Village Industries Commission will assist the village industries to the extent of a little over 9 crores by way of loans and grants for implementing its programme through cooperative societies and registered institutions during the Fourth Plan.

The tentative scheme wise breakup was as follows:

TABLE - 6	
	Rs. in Lakhs
1. Oil	340
2. Hand Pounding of paddy	115
3. Soap making with non-edible oil	34

...contd

	Rs. in Lakhs
4. Pottery	31
5. Leather	30
6. Cottage matches	9
7. Gur - Khandsari	6
8. Integrated Development Scheme	198
9. Fibre	3
10. Bee-keeping	26
11. Blacksmith and Carpentry	6
12. Handmade paper	14
13. Limestone	1
14. Ambar C Khadi	42
15. Hill wool	9
16. Blanket scheme	3
Total	936

SOURCE: Fourth Plan, Directorate of Industries, Uttar Pradesh, Kanpur, August 3, 1965, p.87.

The Khadi Development Scheme which is in operation in 24 districts of the State was strengthened during the Fourth Plan by opening 20 new khadi spinning centres and one service training centre. During 1967-68 about 67 certified institutions and 13 cooperative societies were engaged in khadi work. Their production was valued about Rs. 250 lakhs and employment created was estimated about 6,000 workers; 16,000 weavers & 3400 part-time spinners.

Before March 1967 the department of cooperation was responsible for the organisation & supervision of industrial cooperatives in U.P., but since April 1967 the U.P. Khadi & Village Industries Board is also taking part in the rural industrial development in U.P. The total number of industrial cooperatives working in U.P., during 1967 was 3161 out of 6041 societies registered in U.P. The State Khadi & Village Industries Board made a survey of the situation in 1968 and Balance Sheets of all the village & industrial cooperatives were prepared for the period ending on June 30, '68 to assess their financial position. Instead of pursuing a policy of registration of societies in a liberal way the Board made a selective approach and during 1968-69 only nineteen village industrial cooperatives were registered. During 1969-70 another eighty three village industrial cooperatives came into existence while in 1971-72 about 137 new rural industrial cooperatives were organised. As the budget to finance these industrial cooperatives was not increased, therefore, most of the newly organised societies were not provided financial assistance. Hence they could not start functioning. As a result of the intensive survey in 1969-70 it was noticed that out of 3346 village industrial cooperatives about 1593 were provided financial help by the Board. In short the overall progress was as follows*

No. of societies registered	...	3346
No. of societies financed	...	1593
No. of societies not working	...	1088

*Compiled by the author from Development of Industries in U.P. Progress Report 1972-73, 1973-74 Directorate of Industries, U.P. Kanpur (Hindi Edition).

No. of societies which could be revitalized after providing financial help	1024
No. of societies which could not be reorganised	1234

This indicates a poor record. The state government has provided Rs.5922500 as grant to the Board while the Khadi & Village Industries Commission has earmarked an amount of Rs.5948115 to the U.P.Khadi & Village Industries Board for advancing loan and Rs.1493994 for sanctioning grant to the rural industries. The total expenditure on departmental schemes amounted to Rs.5551552.46 while the total loan advanced to village industrial cooperatives during 1971-72 was Rs.3608000 excluding the grant of Rs.1030258.96 provided to industrial cooperatives during the same period.

Since 1972-73 the U.P.Khadi & Village Industries Board as well as the state government is looking after the development of rural industries. The state government is developing the industries through its departmental schemes while the U.P.Khadi & Village Industries Board is helping them on the terms & conditions laid down by the Commission.

In 1972-73 the state government has sanctioned an amount of Rs.6069800 for the development of industries to U.P.Khadi & Village Industries Board while the All-India Khadi & Village Industries Commission granted an amount of Rs.4878230 for providing loan to village industries & Rs.1050877 by way of grant. The actual expenditure incurred by the Board by September 1972 was Rs.2323157.54. In the Fifth Plan provision for Rs.261.55 lakh has been made for the development of village industries. The central government is expected to meet out an expenditure of Rs. 219 lakh on central schemes for the development of industries in Hill Region through state government.

HANDLOOM:

This industry occupies an important place in the economy of the State and provides potential employment to more than 1 million persons and meets 1/3 of the requirements for cloth. It was expected that by the end of the Third Plan period nearly 80,000 looms will be producing over 120 million metres of handloom cloth. During the Fourth Plan period it was proposed to increase the number of looms to 98,000 and to increase the capacity of each loom from the present 5 metres per day to 6 metres per day. This will increase the production from 120 million metres to around 160 million metres by the end of Fourth Plan period. However, the total number of registered hand looms at present is 2,88,431 which produces about 4,500 lakh metres of cloth annually.* The schemes proposed for the development of the handloom industry during Fourth Plan period aimed at the following:¹

- i). To consolidate, reorganise and stabilise weavers' Cooperative Societies and to strengthen them financially.
- ii). To supply improved tools for increasing productive capacity.
- iii). To impart training.
- iv). To provide common facilities to weavers for dyeing callendering, finishing, etc.
- v). To devote attention to sales promotion and export.
- vi). To introduce standardisation and quality marking.

*. Draft Fifth Five Year Plan - U.P. Volume I, Planning
..contd

- vii). To increase the rate of production of hand-loom cloth from 120 million metres to 160 million metres per annum in 1970-71.

SERICULTURE:

The State offers ideal conditions for the development of sericulture and its allied groups of cocoons. It can become a viable univoltine and bivoltine cocoon production area in country. All the three main species of silk worm viz., Mulberry, Eri and Tussar can be reared, in this State. The Main emphasis in the Fourth Plan was, therefore, on (i) consolidating the work that had already been done in order to ensure productivity and efficiency, and (ii) extending the area of operation in potential hill areas and border regions of the State. During the Fourth Plan the entire sub-mountain belt comprising of Dehra Dun, Saharanpur, Tehri Garhwal, Uttarkashi, Pauri Garhwal, Bijnor, Candi, Basti, Almora, Pithoragarh, Nainital, Pilibhit, Bahraich, Gonda and Gorakhpur has been the field for a phased development of the sericulture industry.

During the Third Plan period an outlay of Rs. 35 lakhs has been put into this industry. During 1963-64

Department, U.P. page 192.

†. Industrial Programme, IV Plan, Kanpur, p.89.

the total output was around 14,500 Kgs. of cocoons and the industry provided direct and indirect employment to nearly 3,000 workers.

During the Fourth Plan period it was proposed to increase the production to around 33,000 kgs. cocoons (sericulture), 3,200 kgs. cocoons (ericulture) and 7,000 kgs. cocoons (tussar). This will provide direct and indirect employment to over 20,000 workers and will call for an investment of around Rs. 75 lakhs.¹

HANDICRAFTS:

Uttar Pradesh is well known for its traditional handicrafts like: Brocades of Varanasi, woollen carpets and druggets of Bhadohi and Mirzapur, brass and copper wares of Moradabad, wood carving of Saharanpur, textile hand-prints of Farrukhabad, Lucknow and Amroha, chicken goods of Lucknow, Tarkashi articles of Mainpur, ivory carvings of Lucknow and Varanasi, glass bangles of Firozabad and horn articles of Sambhal are famous not only in India but abroad also. Handicrafts are important from the point of view of the following:²

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1. Industrial Programmes in U.P. during IV Plan, Kanpur, U.P., pp. 90-91.
 2. Industrial Programmes in U.P. during IV Plan, Kanpur, U.P., p. 91.

- (a) They are based on traditional skills which have been transmigrating more or less on heredity;
- (b) They provide good employment in rural areas and to people who do not have large capital;
- (c) They sometimes fetch fancy prices and have proved excellent foreign exchange earners.

However, their development rests on improving their techniques, availability of new tools, guidance, quality control and promotion of markets. At present the production of handicrafts is not sufficient and falls short of the requirements of established marketing agencies.¹

In brief the state government has helped the development of village and small industries in various ways² viz., by providing finances, marketing facilities development of researches, improvement in quality, conducting training programmes, publicity and propagands. In case of Khadi and Village Industries the state contribution was to the tune of Rs. 25 lakh. For the development of Handicrafts the Fourth Plan outlay was about 70 lakhs. In case of Handloom the Fourth Plan earmarked Rs. 381 lakh over and above Rs. 172.14 lakhs by way of capital expenditure. For the development of small industries the plan provided an amount of Rs. 1423.75 lakhs along with a capital expenditure of Rs. 1060.86 lakhs. In

1. Draft Fifth Five Year Plan, U.P. Vol I, Planning Department U.P. page 194.

total an amount of Rs. 2010.00 lakhs of rupees was provided during fourth plan. The estimated capital expenditure was Rs. 1338.87 lakhs. Foreign exchange worth Rs . one lakhs was expected to be utilised for the development of sericulture.

Thus in total 3349.87 lakhs of rupees was the total budget for the development of village and small scale industries.¹ If we exclude the amount proposed for small industries i.e. Rs. 2484.51 lakh only a small amount of Rs. 865.36 lakhs was left for the development of rural industries.² Taking into view the problem of under employment and unemployment in rural areas this amount was insufficient for creating employment potential in the rural areas. The purpose would have been better served if a dispassionate study of the rural employment generating industries would have been made to provide a guide line for the future planning with a view to strength the foundation of socialist pattern of society in the country side.

FIFTH PLAN:

The Fifth Five Year Plan of Uttar Pradesh like previous plans realizes that the village and small scale industries play an important role in providing subsidiary occupation and supplementary income to persons

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1. The actual amount provided for the programme was Rs. 20.10 crores only (Fifth Five Year Plan - U.P) 1974-75, Planning Department, p. 279.
 2. It is difficult to calculate the exact expenditure incurred on different village industries. According to Fifth Five Year Plan - U.P.(Annual Plan 1974-75)- Planning Department U.P. 1974, it is anticipated that an expenditure of Rs. 14.41 crores would have been

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specially those engaged in primary production, in addition to making a more intensive economic utilisation of material resources and manpower. These industries provide a variety of consumer goods, open avenues for new vocations to small entrepreneurs, serve as important ancillaries to large industries and are above all labour intensive.¹

With an anticipated expenditure of about 14.41 crores during Fourth Five Year Plan², the Uttar Pradesh State Government has succeeded in creating a favourable atmosphere for the growth of small units. A Handloom Corporation has also been set up to provide benefits to the Weaver Community of the State. This Corporation aims at setting up Handloom Cooperatives, provides loans and facilitates, the distribution of yarn to weavers engaged in Handloom and Powerloom Industry. An Export Corporation has been set up in the State for handicrafts articles. The State Government has given substantial assistance for the development of Handloom cooperatives, which are proving effective in protecting the traditional artisans and craft-

incurred by the end of Fourth Plan on village and small industries. Naturally the share of village industries would have been reduced to 500 lakhs instead of 865.36 lakhs as calculated above.

1. Ibid., p. 279

2. See Appendix U

men. Craftmen are also receiving training with a mix of traditional and modern art. The production of pure silk has increased from 3000 kg. to 4000 kg. during Fourth Plan Period. Tsar culture was first introduced in 1971-72 in Chamoli and Pithoragarh Districts. Now it has spread over to the Districts of Pauri and Tehri as well.¹

In this background the fifth plan emphasises for strengthening the existing corporations² and setting up new corporations to look after the interests of specific industries and creating avenues for providing new employment opportunities. In order to develop the existing industries the necessity of consultancy services has been emphasised and it is proposed to develop the focal centres of growth for progressive improvements in the production techniques of the small units, so that they may be in a position to cross the break-even point. With these aims and objectives in view, the fifth plan provides an outlay of Rs. 25.00 crores for promotion and development of small scale industries. Out of which Rs. 4.40 crores have been allotted for 1974-75 as given below.

1. Ibid., p. 279

2. Like Small Industries Corporation, Handloom Corporation, U.P. Agro-Industries Corporation, U.P. State Industrial Development Corporation, U.P. Textile

TABLE — 7

(Rs. in lakhs)

Name of the Programme	Fifth Plan Outlay 1974-79	Annual Plan Outlay 1974-75
1. Small Scale Industries	1,600	280
2. Industrial Estates	150	34
3. Handicrafts	80	15
4. Handloom	500	90
5. Powerloom	40	1
6. Sericulture & Tsar-culture	90	10
7. Khadi & Village Industries	40	10
TOTAL	2,500	440

SOURCE: Fifth Five Year Plan-U.P. Annual Plan 1974-75
Planning Department, U.P. January 1974.

The above table reveals that provision has been made to spend Rs. 1600 lakhs on small scale industries out of Rs. 2,500 lakhs provided during the Fifth Plan. No doubt these industries will increase employment potential but they are mainly concentrated in towns and cities. Hence they will not help in solving the problem of rural unemployment and under-employment.

The Fifth Plan proposed to initiate productivity studies, to improve the quality of product, to provide consultancy services especially techno managerial gui-

Corporation U.P. Sugar Corporation, Pradeshik Industrial and Investment Corporation, Uttar Pradesh.

dance to small enterprises and to provide loans to small entrepreneurs on subsidized rates. Apart from these it is also proposed to increase the share capital - base of Small Industries Corporation, and to establish four new corporation - Brassware Corporation at Moradabad, Foot-wear Corporation at Agra, Electronic Corporation and Consultancy Corporation both at Kanpur.¹

The development of handicraft coopratives will also be intensified during fifth plan. Four pilot projects will be started during the plans at Kashipur. It is expected that handloom industry will have additional spinning units to remove imbalance in between supply and demand of yarn. With a view to better serve the interest of the weavers community the Handloom Corporation is being proposed to be strengthened. Apart from this the schemes of managerial assistance, establishment of design centres, training of Weavers, Organisation of Seminars, provision of credit at subsidised rates of interest etc., will be implemented.

In case of sericulture and Tsarculture it is hoped that during the Fifth Plan the programme will extend to Hill and Eastern Regions of the State. The target is to increase the pure silk production from

1. Ibid., p. 280

4,000 kg. at present to 7,000 kg. at the end of Fifth Plan.

To carry out the programme of Khadi and Village Industries a grant of Rs. 40 lakhs has been proposed for the Fifth Plan for carrying out the programme in twelve selected cottage industries. In view of the importance of these industries from the point of view of producing goods of local consumption by using locally available raw material and helping the poor farmer, under employed labour and hard pressed villager, it is recommended that their development should be given priority in our plans. Moreover these industries should be developed on cooperative farms. Generally the cooperative joint farming and collective farming societies are small in size. They cannot provide employment throughout the year to the workers attached with them. It is, therefore, suggested that poultry, pigery, khandsari, DAL processing and Dairy industries should be encouraged on genuine cooperative farms. Small and newly organised cooperative farming societies may be suggested the development of earthen pottery, Aara Machine for cutting logs of woods, ropes and Baskets Making, Ghee Making, Sheep Rearing, Bee-Keeping etc., according to the availability of technical know how and local requirements.

As pointed out earlier in order to accelerate the economy of the State it is necessary to develop agriculture as well as industry. But the development should be such that it may create more and more employment opportunities. Thus the strategy should be to develop industries in the following way:

1. Industries directly contributing to agricultural development.
2. Industries using raw materials available from agricultural development and generating employment opportunities.
3. Other industries which may use forest products, increases production of ceramic industry and produce goods for consumption.

The employment potential of the industry should be one of the basic criteria in the future development of industries in rural sector. In order to achieve this goal the cooperative farming societies should be encouraged to establish such industries. Moreover the industries contributing directly to agricultural development should also be developed and some centres should be selected to start with. Needless to mention that in respect of employment and gross output potential the rural industries stand better than any other industry. The rural industries also enjoy higher social

value than any other industry. For the prosperity of rural masses who deserve our first attention it is necessary that village industries should be given more encouragement. With this view the amount proposed for the development of village industries is inadequate. At present 1436 cooperative farming societies are functioning in the State. For encouraging industries on these societies an amount of Rs. 14,30,000 will be needed immediately if these industries are given financial help @ Rs. 10,000 per society. The total investment provided under Government plan for the Khadi and village industries is only 40 lakhs. However, with the assistance of All-India Khadi and Village Industries Commission which proposes to invest about 10 crores of rupees, it is expected that the village industries would make progress. Moreover the financial corporations and commercial banks as well as cooperative banks etc. are expected to provide financial help for approved projects. The cooperative department has also made provisions for the development of industries on cooperative farms. All this indicates that there are good prospects of their development in future. However, as yet the impact of cooperative farming on the development of rural industries has not yet been noticed because firstly the cooperative farming societies are in their preliminary stage of development.

Secondly a number of them are running on losses, thirdly members of these societies are sceptical about their progress. Fourthly the finances, technical help, raw material and other infra-structure necessary for their development has not yet been developed. Fifthly, no concentrated efforts have been made for the development of industries nor the district level officials of the cooperative department have been directed by the government to prepare schemes and help the societies in developing suitable industries on their farms. The development of rural industries on cooperative farms was accepted after 1963 but no separate funds under cooperative budget were provided for their development during Third Plan. Sixthly, in U.P. the industrial cooperatives work under the Directorate of Industries, U.P. They are looked after by the District Industries Officer and not by the department of cooperation. Moreover, finances available under Khadi and Village Industries Programme and other schemes of the government have not been allotted on priority basis for the development of agro-industries on cooperative farms. In short neither the cooperative farms have developed potentiality for the development of rural industries nor the government has taken practical steps for their development as a part of the business of cooperative farming societies. The provisions made regarding the development of agro-industries on coopera-

tive farms during IV Plan have not been utilised properly for the development of industries. It is necessary that along with the financial provision of Rs. 5,000.00 per cooperative farming society, technical help, guidance, facilities for securing raw material, marketing facilities and improvement in the technique of production should also be made available to these societies. It may be recommended that genuine societies should be given liberal finances for the development of industries beyond the financial limit laid down by the department. The corporations and Banking Institutions should also consider such case on priority basis.

Professor Farooquee* has rightly remarked that the case for small scale and cottage industries is not a case for protecting uneconomic and inefficient industrial units, but for developing their economic possibilities by introducing up-to-date improvements in their technique of production and organisation. This world, however, require intensive planning and much vigilance on the part of the State. If organised on proper lines they would not only provide better opportunities for labour in India, but would also spread the increase of income more widely and strengthen the investment motive in rural areas.

* For details see: Farooquee, Q.H., Small-Scale and Cottage Industries as a means of providing better opportunities for labour in India, A.M.U., Aligarh, 1958.

CONCLUSION:

The study of the Cooperative Farming and Rural industrialisation with reference to Uttar Pradesh indicates that the cooperative farming could not bring about the desired results. These societies have not been organised on sound lines. They did not give the satisfaction of rise in per capita income and easing the unemployment situation in the rural areas. They have failed to create marketable surplus. To revitalise the economy, U.P. must develop cooperative farming with a strong base of agro-industries. It is recommended that during Fifth Year Plan, emphasis should be laid on the development of rural industries as indicated earlier for developing the economy of cooperative farms. A deliberate shift in State Policy is desired to overcome the bottlenecks that impede the development of agro-industries on cooperative farms.

CHAPTER VII

SUMMARY AND RECOMMENDATIONS

India is predominantly an agricultural country. But the agrarian economy today presents, by and large, a picture of inefficiency and low productivity. Many factors like the growth of population, pressure on land, small size of holdings, breakdown of joint family system, inadequacy of capital and necessary infrastructure have made a cumulative effect on the agrarian economy of the country. Due to excessive dependence on agriculture the land-man ratio is rapidly changing against agriculture. The rural industries are lagging behind the population growth and do not provide employment opportunities to the increasing population. High pressure of population is breeding poverty amongst the agriculturists and the target growth in agricultural sector could not be achieved. Against this background a programme of land reforms was set out in the Second Five Year Plan with a view to removing such impediments upon agricultural production as arise from the character of the agrarian structure, reducing disparities in the ownership of land, and developing a cooperative rural economy. This programme included measures for elimination of intermediaries, tenancy reform, ceiling on land holdings and consolidation of holdings. A great deal has been done in recent years to

abolish the rights of intermediaries like Zamindars, Jagirdars, Inamdars, etc. In almost all States legislation has been enacted and enforced and as a result, a large number of tenant cultivators have come into direct relationship with the State and have become full owners of land. Even so, quite a substantial area is still held under different types of tenancy arrangements on cash rents, or on fixed produce rents or, in the majority of cases, on crop-sharing basis.¹ In easing the land and agricultural situation of the country it was generally expected that measures relating to ceilings will play an important role and therefore, laws were passed by the State governments including Uttar Pradesh. The work for consolidation of holdings carried out throughout the country has promoted land development but it did not effect the total size of a holding. To enlarge the size of operation of unit of cultivation, one of the various possible ways is to develop cooperative farming for reorganisation of agriculture on scientific lines and effective utilisation of the increasing labour force.²

The agriculturist also face the problem of raising a loan to buy wherewithals for the farm as well as to maintain himself till the harvest. His requirements for productive as

1. Quoted from the Report of the working group on Cooperative Farming, Volume I Department of Cooperation, Ministry of Community Development and Cooperation, Government of India, December 1959, P. 10.

2. Ibid Page 13.

well as unproductive expenditure cannot be met by cooperatives or Commercial banks. Still the moneylenders and other private agencies are dominating the rural economy due to their active involvement in fulfilling the credit requirements of the farmers. Hence the problem of providing adequate and timely credit to meet out the increasing demand of agricultural sector need an urgent solution. Farmers with small uneconomic holdings are unable to raise the necessary finance and facilities required for carrying out the farming operations. The crux of the problem in Uttar Pradesh is her vast number of small cultivators who work on uneconomic holdings. They remain idle for about 118 days in a year and are unable to purchase farm requirements due to their poverty. The facilities of farm implements, fertilisers, improved seeds and irrigation are beyond their approach due to their low purchasing power and inadequate facilities to individual small and sub-marginal farmers. As the structure of agricultural economy in Uttar Pradesh is laden with disincentives and is inimical to capital formation, therefore, it is futile to talk merely of improved seeds, implements, manures and irrigation facilities for increasing the agricultural production. The agriculturist must be provided with the necessary incentives to combat the structural defects of agriculture caused by:

- (a) decay of the tenurial system, and
- (b) decline in the size and uneven distribution of the cultivation units and fragmentation of holdings.

To overcome these defects the cooperative farming was considered as a workable solution to the agricultural problems of Uttar Pradesh. In this background I have studied the development of cooperative farming as a means of increasing agricultural production and providing better opportunities for employment through multi-type agricultural activities and agro-industrial development to break the shell of poverty which is the curse of our agrarian economy.

The Five Year Plans of India have repeatedly stressed the importance of cooperative farming in India. As a result of it the work of organising the societies was taken up in accordance with the broad guiding principles indicated by the Government of India in 1960. How far the guiding principles have been observed in practice can be judged from the findings of the summary of the results of investigations made by various organisations in different states of India.¹ In practice, not of course compulsion but baseless assurances regarding government help were given by the field staff to fulfil the targets. Big land lords were allowed to form such societies to avoid the implications of Land Ceiling Act or to take advantage of consolidation of holdings programme and financial help available under the programme. The provision regarding exemption of non-cultivating members of the cooperative societies from the application of certain provision of the tenancy legislation

1 For further details see Report of the Committee of Direction on Cooperative Farming, Ministry of Community Development & Cooperation, Government, 1955.
of 2/2/55

also increased the number of such societies. In societies which came into existence under these circumstances the programmes like intensive method, double cropping and development of ancillary activities to utilise local resources have not been given due priority, nor did they help in increasing production or employment opportunities. The joint cultivation work carried out under joint family system was also rearranged to organise a cooperative joint farming society. Moreover, in the beginning a number of societies like Better farming and Tenant farming were also organised to take advantage of the facilities assured under the programme. The government has taken note of such discrepancies in the implementation of this programme but a number of such societies, which may not be called genuine, still exist. It will be in the interest of the nation to wind up such societies. The government should dissociate herself from such societies. The Second Five Year Plan laid down a course of action for the development of cooperative farming. One of the recommendation was that in each district, and later on in each national extension and community project area experimental or pilot projects in cooperative farming should be undertaken with a view to evolving better methods of management and organisation. These centres were to be developed into practical training centres for cooperative, agricultural and other extension workers. Another recommendation was regarding extensive training in cooperative farming. Yet another recommendation was to take care of societies functioning

indifferently and place as many of them as possible into good conditions so that their success may serve as an incentive to others to form cooperative farming societies. Contrary to these recommendations the field staff followed the short-cut method of increasing the number of societies to fulfil the targets in complete disregard of the spirit behind the scheme. The state governments have also failed to evolve better methods of management and organisation. Provision for extensive training in cooperative farming were not made by the State Cooperative Unions nor the State Advisory Boards have proved effective in guiding the societies. Without investment in education and training the cooperatives cannot be placed on sound position. Hence it is recommended that the National Cooperative Union and the State Cooperative Unions should be strengthened to carry out this work on a large scale. The Universities should also be encouraged to introduce courses on cooperative management for the benefit of the personnel of the cooperative department, field staff and other workers. The Third Five Year Plan suggested a number of measures to accelerate the tempo of organising cooperative farming societies. During this period finances were provided, legislative measures were taken, continuous guidance was assured, incentives for organising societies in bhodan and gramdan villages were provided, training facilities were enlarged and publicity was given to make the programme a success. But the public servants and the financing agencies were not enthusiastic in carrying out the programme because a good deal of time and energy, which should have been devoted to educating, training and

reorienting the people and workers - officials as well as non-officials and demonstrating the techniques and methods that make the cooperative farming societies a success, was not fully utilised. As a result of it though the number of societies was increased, but viewed from the point of view of agricultural production and better employment opportunities, they were lagging much behind the expectations. Thus the Committee of Direction appointed by the Government of India in 1963 recommended that special attention should be paid to consolidation rather than expansion and that whatever expansion is aimed at, should be based on purposive selection of areas in each state for starting intensive programme. It was a timely warning to the policy makers. In order to place the Cooperative Joint Farming and Collective Farming societies on sound footing the pattern of assistance was changed and emphasis was laid on providing assistance to the small and uneconomic holders. Moreover, it was suggested to organise agro-industries and develop allied activities such as dairying and sheep-rearing and the development of non-farm occupations. But all this proved fruitless in the absence of an organised programme for the development of cottage and small scale industries prior to 1963. Even after 1963 adequate finances were not provided for the development of rural industries under cooperative farming programme. Naturally, in the absence of financial help and well defined programme, the cooperative farms did not develop, and the employment potential, with the exception of employment generated due to land improvement,

did not increase, Capital works and certain other activities such as dairying, poultry farming, sheep-rearing started on the initiative of farmers on selected farms. But in view of huge expenditure incurred by the centre as well as the state governments on this programme, the increase in production and employment opportunities created through allied activities has been negligible. The programme has failed in convincing the masses about its further expansion without purging the loopholes. It can be suggested that the government should withdraw its share capital from societies which are not genuine. The loans and managerial subsidy should not be given to the cooperative farming societies established by big land lords or members of a family to take advantage of the scheme. Every state should appoint a committee to go into the details of this problem and suggest remedies. During the Fourth Five Year Plan, the programme of developing agro-industries on cooperative farms was more specific and various financial agencies like Central Cooperative banks, Agro-Industries Corporation, Industrial Development Corporation, Commercial Banks, Khadi and Village Industries Commission were expected to take up the work of financing different types of industries. As the cooperative farming societies were not viable and suffered losses due to inefficient management, inadequate supply of farm requisits, electricity shortage and poor finances therefore, in many cases they have not been granted loans for developing industries. In general their accounts are incomplete and incorrect. The balance sheets and income

and expenditure statements are not prepared in time. The audit objections are not properly rectified. Hence the commercial Banks and other financing institutions hesitate to finance them for setting up new industries. It indicates the poor performance of management and field staff appointed to assist them. The Cooperative Departments of the State Governments are not committed to develop industries through departmental finance. The Directorate of Industries have also not taken much interest in the development of industries on these farms. Consequently most of the farming societies (collective and joint) have yet to organise agro-industries. In most cases, this resulted from the limited nature of the owned resources of members and their incapability to raise them from outside. However, exceptions exist. There are societies which have developed dairying, piggyery and poultry units. Some have flour and saw mills while others, have taken up sheep rearing or have established fibre factory, oil crushing units etc. However these activities do not depict the common feature. They may be deemed as exceptions. It is, therefore, emphatically recommended that all the cooperative farming societies should be encouraged to develop agro-industries, and genuine cooperative farms should be provided sufficient financial help, ranging from Rs. 5000/- to Rs. 50,000 instead of a limited amount of Rs. 5000/-.

Uttar Pradesh is heavy biassed in favour of agriculture which contributes a major part of the states income. It has unfavourable land-man ratio and suffers from inadequacy of capital and resources to develop agriculture. To overcome

these structural defects the target of organising one hundred cooperative farming societies during the First Plan, one hundred during Second Plan and one thousand during Third Plan was not ambitious, in view of the vast land, uneconomic size of holdings and unemployment position in the state. The targets in respect of numerical growth were achieved and during the Fourth Plan also the target of organising such societies was more than realised. Many societies have succeeded in implementing developmental activities and providing work to their members while more than fifty per cent have suffered losses. The total profit of all the cooperative joint farming and collective farming societies amounted to Rs. 28.25 lakhs in 1971-72 while the government has spent about Rs. 1340000 on the salary and allowances of the senior farming inspectors, supervisors, and VLW farming during the year 1971-72.* These societies entirely depend upon the field staff for procuring agricultural requisites, finances, maintaining accounts and preparing plan. It is a pointer to the fact that proper leadership has not been developed and the management is ineffective in carrying out the programme. To do away with this problem it is recommended that the government should prepare suitable programmes for creating leadership in coordination with the Colleges, Institutes and Universities functioning in the State.

*Based on the calculation made by the author on the basis of information supplied by the Deputy Registrar Cooperative Farming and their scale of pay. The expenditure does not include the salary and allowance of Deputy Registrar (Cooperative Farming) U.P. and his office staff. Now it includes the proportionate expenditure regarding Audit and other assistance provided by the Cooperative Department of U.P.

The cooperative farming societies of U.P. suffered from lack of finances and supplies of farm requisites. However, the cooperative farms of big landlords and well connected persons are an exception to it. On the other hand, some societies have not been able to utilise the finances due to lack of planning. Such cases are few. In general, due to lack of financial assistance, inadequate supplies, political rivalry etc. these societies have not developed on sound lines. The Fourth Five Year Plan provided for loan to develop agro-based industries as well as for land development etc. but all the societies could not get advantage of it. The fifth Five Year Plan of Uttar Pradesh proposes to establish one hundred new societies. The financial pattern has also been laid down as follows:¹

Share capital Rs. 1,500 per society.

Agricultural Production Credit Rs. 4,000 per society.

Loan for Land Development etc. @ Rs. 250 per acre.
subject to maximum of Rs. 25,000.

Loan for Agro-based industries Rs. 5,000 per society.

Management subsidy (Total) Rs. 3,000 per society.

No doubt it is an improvement over the strategy followed earlier but it may be suggested that before implementing this pattern it would have been in the fitness of things to investigate into the working of the existing societies.

1. Cooperation in Uttar Pradesh (Hindi) Department of Cooperation, U.P. 1974 Page 40.

Loan for agro-based industries should be provided only to genuine cooperative farming societies. It may be recommended that societies having potential for development should be provided loan ranging from Rs. 5000/- to Rs. 50000/- instead of a fixed amount as laid down in the plan. The observations of the Gadgil Committee regarding the classification of societies of Uttar Pradesh and their working still hold good. The study undertaken by Agricultural Economic Research Centre, University of Delhi which supports the observations of Gadgil Committee also strengthens the authors analysis of the situation. In Uttar Pradesh genuine cooperative farming societies which fulfil our aim of pooling the small holdings for increasing agricultural production and strengthening them financially have not come into existence on a large scale. The societies of big land owners which defeated our aims of cooperative farming have mostly been organised. Such societies are not interested in developing agro-industries or increasing employment avenues. They have switched over to the use of machinery. No doubt they are successful but at the cost of our declared and oft-repeated objective of establishing a socialist society.

In these circumstances, I recommend that a fact finding committee should be appointed to review their progress and suggest measures for the healthy development of cooperative farming societies. This committee should categorise the societies into two classes - societies which should be provided financial help for development of land and industries and societies which do not require such assistance. This

committee should also recommend measures for developing the successful societies which are at their initial stages of development and discontinuing government patronage with the societies which have not been categorised genuine in this work. "It is necessary to focus our attention, first of all, upon those who require the benefits of cooperative activity most. In this perspective, it is evident that efforts should continue to be made, primarily, to organise cooperative farming societies of small and medium cultivators. This will require sustained and continuous effort. The present programme is in its infancy, it will take another 10-15 years before a significant impact is made on the country as a whole. We would like to emphasise that results should not be expected hastily and that there are no short cuts to solving the problems of marginal and sub marginal cultivators."¹

Cooperative farming has a successful carrer in communist countries like USSR, Czechoslovakia and Poland etc. The reasons behind their success can be summarised as follows:

- a. Socialization of land.
- b. Heavy government investment in agriculture.
- c. Supervision of work by trusted party workers who are office bearer of the farm.
- d. Fixation of prices by government.
- e. Full government control on price mechanism and supply of agricultural inputs.
- f. Timely supply of credit and farm requisites.

1. Report of the Committee of Direction on Cooperative Farming, Government of India 1965 Page 204.

- g. Heavy fines on persons found guilty of lagging behind the target.
- h. Favourable land-man ratio.
- i. Advancement of Science & Technology.
- j. Socialist system of providing employment.
- k. Development of Small Scale Industries on collective farms.

In short, the cooperative farms of communist countries are the unique product of their political system. Israil is an example by itself and the success of cooperative farming in this country can be attributed to the circumstances under which Israil came into existence. In other countries which were attracted by socialist philosophy, the degree of success varies from country to country. India can draw lessons from the success of cooperative farming in the communist countries on the one hand and limited progress of such ventures in the democratically ruled independent countries of Africa and Asia on the other. The policies, programmes and methods of the communist countries in this regard can hardly be applicable to Indian society due to its traditional outlook and democratic tools to achieve the targets.

The range of activities of rural industries which can be developed on cooperative farms is immense but their potentialities have not been properly developed in India. During 1951-1971, the number of small scale and village industries was considerably increased in the rural sector but their

development has no relation with the development of cooperative farming. With the exception of a few cooperative farms, the progress of rural industries in general has been slow and negligible on cooperative farms. The cooperative department, Directorate of Industries, financing institutions and the members of the cooperative farming societies are equally responsible for the slow progress of rural Industries on these farms. The development of agro-industries by cooperative farming societies was not encouraged under a well defined programme and recommendations made by various committees for their healthy development have been ignored but the ultimate responsibility for their development was of the cooperative farms, their members and office bearers. Lack of dynamic leadership and enlightened membership and paucity of professional managers have gone a long way in retarding the growth of these farms and development of their income resources. Mr. H. Elldin, a well known Swedish cooperator has rightly said, that "if we had occasion to start our movement a fresh and if we were given the choice between two possibilities that of starting without capital but with enlightened membership and staff or, on the contrary, that of starting with a large amount of capital and ill informed members our experience would inclined us to choose the first course."¹

1. Quoted from Rehman, M. Cooperative Credit and Agricultural Development, Sultan Chand & Sons, 1974. P.127

India has to follow her own policy for the development of cooperative farming and rural industries. As yet the cooperative farming societies have not succeeded in developing agro-based and other employment oriented industries due to their own weaknesses as well as on account of the built in defects of the machinery to implement the programme. It is, therefore, suggested that a long term plan of development of cooperative farming and rural industrialization should be formulated for U.P. with a view to increasing employment opportunities along with the development of agriculture and agro-industries in the rural sector. There are no short cuts to solving the problems of marginal and sub marginal cultivators and providing employment to the increasing rural folk. Hence this study maintains that the programme of developing cooperative farming and rural industries should be viewed in the long term perspective and the teething problems should be faced with imagination and determination. To revitalise the economy of Uttar Pradesh a well considered and deliberate shift in state policy is desired so as to overcome the bottlenecks that inhibit the development of agro-industries on cooperative farms.

APPENDIX 'A'

PROVISIONAL POPULATION

DISTRIBUTION OF WORKERS AS CULTIVATORS, AGRICULTURAL LABOURERS AND OTHER WORKERS ACCORDING TO THE 1971 CENSUS

Persons Males Females	Total Workers	Cultivators	Culti vators as per cent to total workers	Agricul tural labourers	Agri cultu rals La bourers as per cent to total workers	Other Workers	Other Workers as per cent to total workers
2.	3.	4.	5.	6.	7.	8.	9.
P	183,605,325	78,706,876	42.87	47,304,808	25.76	57,593,641	31.37
M	148,789,976	63,965,776	46.35	31,312,812	21.05	48,511,388	32.60
F	34,815,349	9,741,100	27.98	15,991,996	45.93	9,082,253	26.05
P	28,416,871	15,910,591	55.99	5,497,317	19.35	7,008,963	24.66
M	24,777,359	14,644,676	59.11	4,496,029	16.93	5,936,654	23.96
F	3,639,512	1,265,915	34.78	1,301,288	35.76	1,072,309	29.44

CENSUS OF INDIA 1971

POPULATION	...	TOTAL	547 million
		MALES	283 million
		FEMALES	264 million
DECENNIAL GROWTH RATE	...		24.66 Per cent
DENSITY OF POPULATION			182 Per sq. Km. (Excluding the figures for J & K and N.E.F.A. for which full data are not available).
SEX RATIO			932 females per 1000 males
LITERACY RATE		TOTAL	29.34 percent
(Including age group 0-4)		MALES	39.51 Per cent
		FEMALES	18.44 per cent
PROPORTION OF URBAN POPULATION TO TOTAL POPULATION	..		19.87 per cent
PERCENTAGE OF WORKERS TO TOTAL POPULATION(Main Activity only)	..	TOTAL	33.54
		MALES	52.53
		FEMALES	13.18

APPENDIX 'A' Contd.

GROWTH OF POPULATION FROM
1901 - 1971

Year	Persons	Per cent Decade Variation
1.	2.	3.
1901	238,396,327	
1911	252,093,390	5.75
1921	251,321,231	(-) 0.31
1931	278,977,238	11.00
1941	318,660,580	14.22
1951	361,088,090	13.31
1961	439,234,771	21.51
1971	547,949,809	24.80

Source : Census of India 1971

APPENDIX 'B'

Targets and Achievements of Foodgrains Production

(In million tonnes)

<u>Year</u>	<u>Target</u>	<u>Achievement</u>
1950-51	N.A.	54.91
1955-56	N.A.	66.85
1960-61	N.A.	82.02
1965-66	N.A.	72.35
1966-67	N.A.	74.23
1967-68	N.A.	95.05
1968-69	98.00	94.01
1969-70	101.00	99.50
1970-71	106.00	108.42
1971-72	112.00	105.17
1972-73	119.00	97.03
1973-74	115.00	103.61
1974-75	118.00	-
1978-79	140.00	-

SOURCE : By courtesy of Department of Agriculture (Ex.Div.)
Ministry of Food, Agriculture, Community Development
and Cooperation, Govt. of India, New Delhi.

APPENDIX 'B' Contd.

FIFTH PLAN - TARGETTED AREA UNDER VARIOUS CROPS:

(In Million Hectares)		
Group of Crops.	Anticipated Area 1973-74	Targetted 1978-79
1. Rice	38.50	40.00
2. Wheat	20.00	22.00
3. Maize	6.00	6.50
4. Jowar	17.50	18.00
5. Bajra	13.00	13.50
6. Other coarse grains	9.00	9.00
7. Pulses	22.50	24.00
Foodgrains (Total)	126.50	135.00
8. Sugarcane	2.80	3.20
9. Cotton	7.80	8.60
10. Oilseeds(five major oil-seeds, sunflower and soyabean).	15.90	17.80
11. Jute and mesta	1.10	1.20
12. Other crops	15.00	16.20
Gross cropped area	169.10	180.00

SOURCE: By courtesy of Department of Agriculture (Ex.Div.) Ministry of Food, Agriculture, Community Development and Cooperation, Govt., of India, New Delhi, Typed Manuscript.

FIFTH PLAN - TARGETTED AREA UNDER VARIOUS CROPS:

Crop group of crops.	(In Million Hectares)	
	1973-74 anticipated area.	1978-79 targetted.
1. Rice	38.50	40.00
2. Wheat	20.00	22.00
3. Maize	6.00	6.50
4. Jowar	17.50	18.00
5. Bajra	13.00	13.50
6. Other coarse grains	9.00	9.00
7. Pulses	22.50	24.00
Foodgrains (Total) :	126.50	135.00
8. Sugarcane	2.80	3.20
9. Cotton	7.80	8.60
10. Oilseeds (five major oilseeds, sun flower and soyabeen).	15.90	17.80
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12. Other crops	15.00	16.20
Gross cropped area:	169.10	180.00

SOURCE : By courtesy of Department of Agriculture (Ex.Div.)
Ministry of Food, Agriculture, Community Development
and Cooperation, Govt. of India, New Delhi, Typed
Manuscript.

APPENDIX C

V — AGRICULTURE

28. Land Utilisation

Items	(1 000 Hectares)			
	1960-61	1965-66	1967-68	1968-69
Geographical Area*	25,381	25,316	25,505	25,471
Forest	1,960	1,941	2,132	2,145
Barren & unculturable Land	1,140	1,065	1,035	1,024
Land Put to Non-agricultural uses	1,912	1,988	2,017	2,008
Culturable waste	1,640	1,489	1,411	1,397
Permanent pastures and other grazing Land	44	66	75	76
Land under miscellaneous tree crops and groves	719	637	636	637

*Reporting area for land utilization purposes.

V — AGRICULTURE

28. Land Utilisation

Item	(1 000 Hectares)			
	1960-61	1965-66	1967-68	1968-69
Current Fallows	146	865	828	793
Other Fallows	1,260	548	531	602
Net area sown	16,561	16,716	16,840	16,789
Area sown more than once	4,463	4,651	5,164	4,865
Net area irrigated	50.44	58.45	56.27	65.32

N.B. Exclusive of conventionally estimated area of hills.

SOURCE: Statistical Diary 1970 Uttar Pradesh.

APPENDIX 'C'

Uttar Pradesh Classification of Area and Irrigated Area, 1970-71.

Net area sown	173.05
Total area cropped area	232.07
Area sown more than one	59.02
Cropping intensity(Percentage)	134.01
Net irrigated area	71.90
Gross irrigated area	82.44
H.V.P. area	27.09
% of irrigated area to total cropped area.....	31.06
% of H.V.P. area to gross cropped area.	11.06

All India Classification of Area and Irrigated Area, 1970-71.

Net Area sown	1411.61
Total cropped area	1674.12
Area sown more than once	262.51
Cropping intensity(Percentage)	118.05
Net area irrigated.	312.92
Gross irrigated area	385.52
H.V.P. Area	152.91
Percentage irrigated area to total cropped area...	23%
Percentage of H.V.P. area to gross cropped area..	9%

SOURCE: By courtesy of Department of Agriculture(Ex.Div.)
Ministry of Food, Agriculture, Community Development
and Cooperation, Govt. of India, New Delhi, Typed
Manuscript by 1975.

APPENDIX 'D'

TOTAL FOODGRAINS

		INDIA	U.P.
1969-70	A	1,23,570	19,428
	P	99,501	17,547
	Y	805	903
1970-71	A	1,24,316	19,631
	P	1,08,422	19,585
	Y	872	998
1971-72	A	1,32,623	19,359
	P	1,05,168	17,697
	Y	858	914
1972-73	A	1,19,277	19,357
	P	97,026	18,154
	Y	813	938
1973-74	A	1,26,128	19,233
	P	1,03,611	15,729
	Y	821	818

A = Area in '000 Hectares.

P = Production in '000 Tonnes.

Y = Yield Kg/Hectares.

SOURCE: By courtesy of Ministry of Food, Agriculture
Community Development & Cooperation, Govern-
ment of India, New Delhi.

APPENDIX E

(COPY OF LETTER NO. 12-9(II)/61-CD/AGRI. ISSUED BY THE PLANNING COMMISSION. GOVERNMENT OF INDIA, ON MARCH 25, 1963).

REVISED PATTERN OF ASSISTANCE

At the last Conference of State Ministers of Cooperation held at Lucknow on February 11 and 12, 1963, it was emphasised that due to availability of Central assistance for cooperative farming societies in non-pilot areas outside the State plan ceiling, some of the States preferred organisation of non-pilot societies to those in the pilot areas. With a view to ensuring adequate progress in the pilot project areas and for discouraging the tendency, the Conference recommended:

"The present distinction between non-pilot and pilot societies should be done away with and the two programmes should be treated alike. Government should participate in the share capital of non-pilot societies also and for the purpose additional funds should be made available. If that was not possible, it should be done by readjustments of the targets".

2. This matter was further considered in the Planning Commission in consultation with the Ministry of Community Development and Cooperation (Department of Cooperation) and the Ministry of Finance and the pattern of financial assistance for cooperative farming societies has been revised, in supersession of Planning Commission's letter No. 12-9(II)/61-CD dated November 14, 1961 as follows:

- (i) Cooperative farming societies both in the pilot and non-pilot areas will be entitled to Central assistance outside the State Plan ceiling but of Rs. 6 crores provided as Central assistance to non-pilot societies.

The state Governments should, bb

The State Governments should, however, provide their share of assistance to the societies in the two areas (pilot and non-pilot) as a part of the State plan and within the State plan ceilings:

- (ii) The existing provision of Central assistance for cooperative farming in pilot areas as provided in the State plan ceilings will be available for schemes of cooperative development including cooperative farming and the State Governments will be free to utilise a part of this provision to further supplement the programmes for cooperative farming.
- (iii) The limit of organisation of ten cooperative farming societies in a pilot project may be exceeded subject to the condition that the criteria regarding viability etc., are adhered to:
- (iv) Cooperative farming societies in non-pilot areas will also be entitled to a share capital contribution up to Rs. 2,000 each on the same terms and conditions as pilot societies.
- (v) The revised pattern of assistance will take effect from the year 1963-64. However, cooperative farming societies in the pilot and non-pilot areas, which have not received full assistance, will be eligible to receive the balance of the assistance or additional assistance if admissible according to the revised pattern:

5. The main object of the revised pattern of assistance is to provide greater emphasis on the organisation of cooperative farming societies in the pilot areas. The state governments are requested to review the entire programme in the light of the above decision and formulate an expanded programme in an integrated manner for organising cooperative farming societies in the pilot and non-pilot areas. While doing so, the emphasis in the organisation of pilot projects not should not be lost sight of.

SOURCE: Cooperative Policy and Programmes (Part II), Important Letters and Schemes Relating to Cooperative Development, NCUI, pp. 40-41.

APPENDIX (E)

(EXTRACTS FROM LETTER NO. F.2-13/62-C. F., ISSUED BY THE MINISTRY OF COMMUNITY DEVELOPMENT AND COOPERATION (DEPARTMENT OF COOPERATION), GOVERNMENT OF INDIA, ON MARCH 29, 1963).

PATTERN OF ASSISTANCE FOR CO-OPERATIVE FARMING SCHEME

In pursuance of the recommendation of the Conference of State Ministers' of Cooperation held at Lucknow, in February, 1963, the pattern of financial assistance for cooperative farming schemes for pilot and non-pilot project areas has been reviewed and the recommendations of the Conference have been accepted by the Government of India and the Planning Commission. A copy of the instructions issued on the subject by the Planning Commission (vide No. 12-9(II)/61-CD/Agri. dated March 25, 1963) is enclosed.

2. Although the distinction between pilot and non-pilot areas has been removed with regard to financial assistance, the main object of the revised pattern is to lay greater emphasis on cooperative farming societies in pilot areas would be outside the State plan ceilings from the year 1963-64 and that the Central assistance provided in the State plans for pilot projects would be available to supplement the resources of the State, it is necessary that the programme of cooperative farming in pilot projects for the year 1963-64 should be reviewed and a larger programme formulated. In States where there is considerable back log, efforts should be made to clear the same and achieve the targets as early as possible. Wherever the provision in the budget for the year 1963-64 is found inadequate, for the expanded programme, action should be taken to secure additional resources

Contd

APPENDIX E

WORKING GROUP ON COOPERATIVE FARMING APPOINTED BY THE GOVERNMENT OF INDIA IN 1959

Following are some of the recommendations made by the Working Group:

1. At the rate of one project per district it is necessary to establish 320 carefully planned pilot projects during the next four years in those N.E.S. blocks where the cooperation programme has advanced. At the rate of 10 societies per block we should organise 3,200 cooperative farming societies.
2. In order to help these societies in the formulation and execution of production programmes and render technical guidance, the Block staff in each pilot project area should be strengthened by the addition of a special officer in charge of cooperative farming.
3. Due to the working of the pilot projects, the education and training programmes and the widening of cooperative effort the cooperative farming movement would receive an impetus and 20,000 new societies should come into existence by the end of Third Five Year Plan.
4. Each society in the pilot project should be entitled to a financial assistance of Rs. 12,800. Up to the end of the Third Plan the financial requirements of 3,200 societies in pilot project areas as well as 20,000 other new societies would amount to Rs.2,864 lakhs.

Contd.....

5. 160 cooperative farming training centres should be established for training 2 lakhs of young farmers and 26,000 secretaries of cooperative farming societies. In order to train the instructors required for running the training centres as well as for carrying out research on major problems that confront cooperative societies, it is necessary to establish a National Institute of Cooperative Farming. The education programmes will cost Rs. 424.4 lakhs during the period of the Third Five Year Plan.

6. The total outlay on the programme suggested for the Third Five Year Plan would come to Rs. 3,526.14 lakhs.

Though the Group proposed a bigger outlay on cooperative farming than was allotted in the Second Plan, the programme recommended by the working group does not basically differ from that contained in the Second Plan document.

SOURCE: Laxminarayan and Kanungo, 'Glimpses of Cooperative Farming in India', Asia Publishing House, New Delhi, 1967, p. 116.

through supplementary budget.*

APPENDIX F

PATTERN OF ASSISTANCE

(EXTRACTS FROM LETTER No. F.5-14/60-F of THE MINISTRY OF COMMUNITY DEVELOPMENT AND COOPERATION (DEPARTMENT OF COOPERATION) DATED SEPTEMBER 23, 1960).

ELIGIBILITY FOR NORMAL ASSISTANCE

(i) Cooperative farming societies should be eligible for assistance on a priority basis under various schemes which provide for assistance to individual cultivators. For this purpose, if necessary, the rules governing such assistance may be suitably revised.

(ii) The State may participate in the share capital of such societies, subject to a ceiling of Rs. 2,000 for a society. As a general rule, the amount of share capital contributed by the State should not exceed the amount raised by the members of the society and the States' share capital should be retired over a period of ten years. Contributions to the share capital need not be accompanied by nomination of directors by Government.

SHORT-TERM CREDIT FOR COOPERATIVE FARMING SOCIETIES

(iii) It is, desirable that where a group of cultivators in a

village form a cooperative society, the society should become a

* SOURCE: Cooperative Policy and Programmes (Part II), Important Letters and Schemes Relating to Cooperative Development, NCUI, p. 39.

member of the primary service cooperative. The short-term credit required by a cooperative farming society should be made available either by the central bank direct or by the village service cooperative according to convenience and local facilities and resources available. The cooperative farming society should be able to take full advantage of the primary service cooperative in respect of supplies, marketing, etc. and thereby strengthen its activities.

MANAGERIAL SUBSIDY FOR COOPERATIVE FARMING SOCIETIES

(iv) A total subsidy not exceeding Rs. 1,200 may be given to a cooperative farming society over a period of three to five years towards its managerial expenses.

ASSISTANCE FOR GODOWN-CUM-CATTLE-SHED

(v) A sum not exceeding Rs. 5,000 (25 per cent subsidy and 75 per cent loans might be given to a cooperative farming society for construction of a godown-cum-cattle-shed. In giving such assistance care should be taken to avoid duplication and overlapping between the construction of accommodation for the service cooperative farming societies in the village.

MEDIUM AND LONG-TERM LOAN

(vi) As regards long and medium-term loans, assistance should be provided by Government where and to the extent the societies are

unable to secure their requirements from central cooperative banks or land mortgage banks. Government may provide on an average up to Rs. 4,000 to cooperative farming societies by way of loans for their programmes of development. To the maximum extent possible, additional requirements of cooperative farming societies should be met out of the provision available in the agricultural sector of the plan and those in the schematic budget of the community development blocks.

GUARANTEES TO CENTRAL BANKS

(viii) There is no need to give any guarantees to central cooperative banks in respect of short-term loans given by them to cooperative farming societies. The advances given to cooperative farming societies by central cooperative banks should, however, be taken into consideration for the purpose of the proposed Government contribution to their special bad debt fund at one per cent of the additional loans given by them for agricultural production over and above the loans given in the preceding year. These grants should be shared equally by the State Government and the Government of India.

SOURCE: Cooperative Policy and Programmes (Part II), Important Letters and Schemes Relating to Cooperative Development, NCUI, New Delhi.

APPENDIX G

(LETTER NO. F. 3-6/60-C.F. ISSUED BY THE MINISTRY OF COMMUNITY DEVELOPMENT AND COOPERATION (DEPARTMENT OF COOPERATION), GOVERNMENT OF INDIA, ON JUNE 26, 1961).

PATTERN OF SHARING ASSISTANCE

I am directed to refer to this Ministry's letter No. F.5-14/60-F&S dated September 23, 1960, wherein it was mentioned that a further communication would follow regarding the manner in which the Centre and the State Governments would share the finances during Third Five Year Plan.

2. It has been decided that the financial assistance to cooperative farming societies will be shared by the Centre and the State Governments on the following basis.

1. Assistance to Cooperative Farming Societies in the Pilot Area.

S.No.	Item of Assistance	Total Amount per Society Rs.	State Share %	Central Share
LOANS:				
1.	Share contribution (the contribution made by the State will not exceed the amount of the shares raised by the members of society).	2,000	25	75
2.	Medium and long term loans.	4,000	25	75
3.	Godown-cum-cattle-shed (in the ratio of 1:5).	3,750	16-2/3	83-1/3
4. SUBSIDIES:				
1.	Godown-cum-cattle-shed	1,250	50	50
2.	Managerial subsidy (over a period of 3 to 5 years as decided by the State Government).	1,200	50	50

II. Assistance to Societies Outside the Pilot Areas.

Societies outside the pilot areas will be eligible to all the items of assistance mentioned above except share capital participation.

III. Extra Department Staff and State Boards

<u>State Share</u>	<u>Central Share</u>
50%	50%

The loan will carry interest at the rates prescribed by the Central Government from time to time.

3. The pattern of sharing the expenditure in regard to the training and education schemes is still under consideration and a separate communication will follow.

SOURCE: Cooperative Policy and Programmes (Part II), Important Letters and Schemes Relating to Cooperative Development, NCUI, pp. 43-44.

APPENDIX H

(LETTER NO. F.2-4/63-CF, ISSUED BY THE MINISTRY OF COMMUNITY DEVELOPMENT AND COOPERATION (DEPARTMENT OF COOPERATION) GOVERNMENT OF INDIA, ON SEPTEMBER 4, 1963).

ASSISTANCE FOR CONSTRUCTION OF GODOWN-CUM-CATTLE-SHED

I am directed to refer to this Ministry's letter No. F.3-6/60-CF dated June 27, 1963 wherein an amount of Rs. 5,000 for construction of godown-cum-cattle-shed has been made. The meetings of the state Level Officers incharge of cooperative farming held at Jaipur in April, 1963 suggested that the above amount of Rs. 5,000 may be allowed to be diverted for land development provided satisfactory arrangements are made for storage of produce and for keeping the cattle. This matter was also considered by the Executive Committee of the National Cooperative Farming Advisory Board.

2. After taking into account the recommendations of the Executive Committee and the conference of State Level Officers, the Government of India have decided that out of Rs. 5,000 earmarked for godown-cum-cattle-shed, the loan amount of Rs. 3,750 may be utilised by the State Governments for land development subject to the following conditions:

- i). the State Government should certify that proper arrangements have been made for storage of agricultural produce and for keeping the cattle.
- ii). the subsidy of Rs. 1,250 available under the scheme for godown-cum-cattle-shed may be given to a society only after the society has constructed a godown-cum-cattle-shed out of its own resources at a total cost of Rs. 5,000 which should also be certified by the State Government.

iii). the loan and subsidies should be shared by the State and the Centre according to the pattern communicated vide this Ministry's letter No. F. 3-6/60-CF dated 27-6-61.

3. The diversion of funds will be allowed in the first instance up to 30-3-1965 when the position will be reviewed.

SOURCE: Cooperative Policy and Programmes (Part II), Important Letters and schemes relating to cooperative development, NCUI, New Delhi, p. 42.

APPENDIX (I)

U.P. Expenditure on Development Programme

Item	I Plan Expendi- ture	II Plan Expenditure	III Plan Expendi- ture	1966-67 Actual	1967-68 Actual	1968-69 Likely	1969-70 Antici- pated	1970-71 Outlay	IV Plan Outlay
1. Agri. and Allied Programme	2,938	3,978	10,727	4,058	4,089	3,435	3,557	3,689	19,920
2. Co-operative and Community Deve- lopment	982	3,178	5,682	725	365	340	306	330	2,215
3. Irrigation and Power	5,622	8,218	21,870	7,352	7,615	7,333	9,230	9,718	47,300
4. Industry and Mining	637	1,292	2,083	560	651	565	648	722	4,477
5. Transport and Communication	686	1,537	2,816	586	488	592	735	766	5,775
6. Social Services	4,474	4,544	10,273	1,469	1,631	1,898	2,028	2,061	14,427
7. Miscellaneous	-	587	2,607	345	297	425	434	633	3,286
Total	15,399	23,334	56,058	15,095	15,136	14,588	17,919	17,919	96,500

SOURCE: Statistical Diary, Economics and Statistics Directorate, Uttar Pradesh, 1970 pp. 180-181.

Contd.

APPENDIX I

(Rs. round lakh)

Name of Sector	Fourth Plan approved outlay	Outlay for 1973-74		Anticipated expenditure during 1973-74	Likely expenditure during Fourth Plan	Fifth Plan Outlay		
		Approved	Received			Total	Capital	Foreign Exchange
1.	2.	3.	4.	5.	6.	7.	8.	9.
Community Development	1,015	100	100	101	892	900	305	..
Panchayats	100	50	22	50	173	300	14	..
Project Programme of rural development	100	..	..	..	..	500	..	..
Land Reforms	2,000	450	450	520	2,262	3,000	..	..
Total, Agriculture, Allied Cooperative & Community Development.	22,085	5,219	4,839	6,269	24,629	40,291	22,338	104
Total Irrigation & Power	47,300	11,764	11,414	13,789	60,299	1,72,491	172,491	7,020
Total Industry & Mining	4,527	1,088	963	1,225	5,398	14,600	12,884	20
Road & Road Transport	5,775	1,522	1,416	1,716	6,778	25,200	24,818	33
Total Social Service	14,377	4,380	4,087	4,380	14,914	40,570	11,603	130
Miscellaneous	2,436	1,027	865	834	3,027	6,826	6,095	35

SOURCE: Fifth Five Year Plan Uttar Pradesh, Annual Plan 1974-75, Planning Department Uttar Pradesh, pp. 512-515.

APPENDIX CONTD...I...

Annual Plan 1974-75			Break-up of Outlay			
Total	Capital	Foreign Exchange	1975-76	1976-77	1977-78	1978-79
10.	11.	12.	13.	14.	15.	16.
145	36	..	181	187	192	195
50	10	..	67	67	68	48
50	..	..	75	100	125	150
623	..	..	612	600	588	577
6,523	3,428	18	8,526	8,404	8,314	8,481
21,490	21,490	510	38,119	38,086	39,405	35,391
2,300	2,060	..	2,477	3,236	3,112	3,475
2,620	3,584	5	4,405	5,660	5,075	6,440
5,118	1,643	7	8,292	9,367	9,002	8,791
766	608	3	961	1,353	1,666	2,080

APPENDIX J

COOPERATIVE MOVEMENT ALIGARH DISTRICT

S.No.	Name of Society	1965	1974
(A) CREDIT:			
	District Cooperative Bank	1	
	Multi Purpose	72	59
	Service Cooperative	419	460
	Non-Agricultural	16	19
(B) PRODUCTIVE & SALES:			
	Marketing (integral)	7	6
	Block Development Union	47	47
	District Cooperative Development Federation	1	1
	Large Scale Societies	59	59
	Farming	22	24
	Milk Marketing Unions	1	1
	Seed Stores	40	40
	Total Membership	11,8,603	1,63021
	Agricultural Families	1,50,000	1,56319

APPENDIX K.

COLLECTIVE FARMING(Russia)

The Cooperative Collective Farming (Kolkhozes) are the product of socialist reconstruction of Russia. The first cooperative credit association which was formed in 1865 in the village Rozhdestvenskoye of Kostroma province under the leadership of Luginin who was inspired by the Schulze-Delitzsch Cooperatives of Germany and gave birth to a number of cooperatives credit societies. After 1917 Socialist Revolution, cooperation was also subjected to the socialist control. A number of communes, collective farms, agricultural Artels etc. came into existence and some of them disappeared giving birth to some new shortest period by cutting across the procedure.

TOWARDS COLLECTIVIZATION

Lenin's Cooperative Plan opened new doors for socialist approach to cooperation. In due course a number of cooperative credit societies were changed into the marketing and supply societies to serve the purpose of a socialist state under the iron hands of Stalin. The marketing and supply societies brought peasants nearer to the production cooperatives. They were entering into contracts with the individual villages for supplying foodgrains and other products at the contracted rates and providing finances in advance for helping

Contd

the cooperatives. As the land was State's property in accordance with the Decree on land and the farmers were poor, therefore, it was the most attractive arrangement for them. Consequently the farmers instead of entering into contracts with the marketing and supply society individually were convinced to enter into contract collectively on behalf of the village. This gave rise to the 'Associations of Common Village of Land' which later on took the form of village cooperative. After a successful experience of the Communist Party to bring farmers nearer to collectivization through village cooperatives and preparing technical base the party undertook the work of mass collectivisation of individual farms in 1929. Hence, the majority of the farms were collectivised during 1929-30.

NOT VOLUNTARY

It was not a voluntary action. No doubt, blood was shed, property was destroyed and more than five lakhs of persons were killed during the process of collectivisation. History will hardly witness any other event of such massacre. But to the planners it was all right. To satisfy the masses a face saving device was adopted by transferring the officers and giving minor punishments, which can hardly compensate the loss of blood, property and disrespect to the ladies of landlords.

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PARTY DOMINATION

Now every collective farms is dominated by the Communist Party. The Party actively works in the election of the office bearers and hardly a non-Communist has any chance of securing votes in his favour in the election of office bearers of the collective farm. Rather, a non-Communist can hardly be proposed for an any office in the collective farm. The by-laws of the collective farms are approved by the Government and the detailed procedures regarding each and every activity of the collective farm are dictated through members of the Communist Party. The Government never comes directly into the picture in the day to day work although it dominates the activities of the collective farm through party members.

PAYMENT

The payment is made on the basis of labour put in by the workers in farm operations. The payment is made partly in cash and partly in kind. Bonus is paid on over fulfilment of the plan.

GENERAL MEETING

The targets of productions are fixed in the general meeting in which Communists and Komsomols (Young Communists) play an active role. The party forces its demands in the general meeting through majority vote. Any person who opposes the Communist Party leader is suspected and condemned. No doubt, sometimes the leader of Communist

Contd

party may be laid down by another worker on many other grounds, if the party member has earned a bad name. This is exceptional.

MACHINE TRACTOR STATIONS

In the development of kolkhozes the machines and tractor stations have played a major part and became focal points of State supervision of collective farming on local level. As the collective farms were in a position to acquire their own machinery the machine and tractor stations were abolished in 1958. At the same time, machine and tractor stations were organised to serve the collective farms with specialised equipment (land reclamation machines, excavators, ditching machines, etc.).

PROGRESS

With in a short period of their existence the kolkhozes made a landmark in the agricultural economy of the Soviet Union. In the early years of collectivisation a kolhoz generally embraced a village, several kolkhozes being organized in large villages. In 1932 an average kolhoz had 71 households, 434 hectares of socialised land under crops, 42 head of cattle, 15 pigs and 54 head of sheep and goats in 1963 a kolhoz had at an average 411 households and 2,896 hectares of socialised land under crops, 944 head of publicly-owned cattle, 405 pigs and 1,555 head of sheep and goats.

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At the end of 1963, they owned 1,241,000 tractors (in terms of 15 h.p. units). 235,000 grain harvesting combines. 444,000 motor lorries and a huge amount of equipment. In 1964 the sown area of collective farms increased in 114.0 million hectares. During the same year the share of kolkhozes in the total production of USSR was 70 per cent in foodgrains, 60 per cent potatoes, 60 per cent in milk and 65 per cent in total meat production.

OTHER COUNTRIES

The collective farms of Poland, Czechoslovakia and German Democratic Republic also resemble the collective farms of Russia.

APPENDIX 'L'

RECOMMENDATIONS OF THE WORKING GROUP APPOINTED BY THE GOVERNMENT OF INDIA IN 1957 WHICH SUBMITTED ITS REPORT IN 1959 MAIN RECOMMENDATIONS ACCEPTED BY THE GOVERNMENT OF INDIA ARE AS FOLLOWS:

1. Conversion of proprietary concerns into industrial cooperatives and enrolment of associate and nominal members.
 2. Provision of loans to artisans to enable them to take shares in industrial cooperatives.
 3. To secure and distribute large orders by government to industrial cooperative.
 4. Providing loans and subsidies by Government to help industrial cooperatives to build godowns on the same lines as marketing cooperatives.
 5. Supply of equipment, imported machinery and tools on a preferential basis to industrial cooperatives and advance of loans to cover such purchases.
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APPENDIX 100

COOPERATIVE FARMING

Letter No.F 5-21/62-CF, issued by the Ministry of Community Development, Panchayati Raj and Cooperation (Department of Cooperation, Government of India, On January 2, 1963).

KHADI AND VILLAGE INDUSTRIES COMMISSION ORDER No. 5/28/BGT/62,
DATED APRIL 23, 1962.

FINANCIAL ASSISTANCE TO COOPERATIVE FARMING
SOCIETIES — SANCTION OF FUNDS DURING
1962-63

Khadi and Village Industries Commission is pleased to direct that cooperative farming societies undertaking development of village industries with the purview of the Commission shall, in addition to the financial assistance under the prescribed patterns of financial assistance for the respective schemes, be eligible for grant towards the salary of a technical person to be appointed for organising the work in connection with development of village industries falling within the purview of the Commission. This managerial grant shall not exceed Rs. 100 per month on the scales mentioned below and shall be paid from the date of undertaking the village industries programme provided the industries undertaken for development are more than two.

(a) First Year: 100 per cent of the salary of one technical manager subject to a maximum of Rs. 1,200 per annum.

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- (a) First Year : 100 per cent of the salary of one technical manager subject to a maximum of Rs. 1,200 per annum.
- (b) Second Year : 75 per cent of the salary of one technical manager subject to a maximum of Rs. 900 per annum.
- (c) Third Year : 50 per cent of the salary of one technical manager subject to a maximum of Rs. 600 per annum.
- (d) Fourth Year : 25 per cent of the salary of one technical manager subject to a maximum of Rs. 300 per annum.

The expenditure will be incurred subject to the following conditions:

- (a) The expenditure will be incurred in accordance with the financial pattern approved by the Commission.
- (b) Approval of the Standing Finance Committee(V.I) shall be obtained in each case of disbursement before the grant is disbursed.

SOURCE: Cooperative Policy and Progress(Part II), Important letters and Schemes relating to Cooperative Development, National Cooperative Union of India, New Delhi, 1963.

APPENDIX N

The Second Working Group on Industrial Cooperatives appointed in 1962 submitted its report in 1963. The main recommendations accepted by the Government of India in 1966 are as follows :

1. Encouraging agricultural primary societies to finance village craftsman.
2. Encouraging coir cooperatives to purchase husk and sell roasted husk to members.
3. Undertaking activities such as market intelligence service, development of ancillary production, etc. by supply and sales societies.
4. Exploring the possibility of forming cooperative credit guarantee organisations.
5. Setting up of Standing Advisory Committee for cooperatives in each of the All-India Board.
6. Developing inter-cooperative relationship by creating organisational and other contacts between them at various levels.
7. Giving funds required by the members for the purchase of shares to the members individually.
8. Giving staff assistance to apex and central cooperative banks for financing industrial cooperatives and creating special bad debt funds in central financing and industrial cooperative banks.
9. Routing Government and Khadi and Village Industries Commission loans through the central cooperative banks (not through Panchayat Samities).
10. Allowing the 90 per cent guarantee scheme to continue as a regular scheme.
11. Emphasising the organisation of societies of craftsman and workers and giving them a distinct treatment in providing assistance,

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12. Suggesting urban cooperative banks to advance loans to industrial cooperatives.
13. Setting up of Federation of Industrial Cooperatives at various levels on single or multi-industries basis.
14. Revitalisation of dormant societies.
15. Repayment of loans advanced by the State Government to the industrial cooperative and managerial grants from Government to industrial cooperatives.
16. Allotment of separate quotas of controlled raw materials to industrial cooperatives and channelling through the apex industrial cooperative institutions.
17. Allowing price preference to the products of industrial cooperatives.
18. Suggesting creation of price fluctuation funds from the net profits by the primaries and federation of primaries.
19. Providing financial accommodation to the cooperatives by the Reserve Bank of India under section 17(2)(bb).
20. Rationalising of rate of interest irrespective of the source of the funds.
21. Turning about 50 per cent of the small factories and industrial households in the urban and rural areas into cooperatives.

APPENDIX 'O'

A special working group of financing industrial cooperatives by cooperative banks was set up by the Ministry of Industry in June, 1966. The group submitted its report in July, 1966. The important recommendations of the Group are given below:

- (i) The Group reiterated its faith in the recommendations made by the First and Second Working Group stating in unambiguous terms that it is the duty of the cooperative banks to finance not only the agricultural but non-agricultural sector also. They should, therefore, give priority to the demands of the Industrial Sector. To fulfil this purpose effectively, a portion of their funds should be earmarked for industrial purpose in their annual budgets and programmes. The percentage may vary 2 to 5% of their total advances. The Banks should also set up industrial wings, Create special bad debts funds and set up industrial sub-committees with a representative to the industrial cooperatives on each such committee.
- (ii) Clean accommodation to industrial cooperative societies to the extent of their owned funds, accommodation against the security of fixed assets and against a floating charge on assets where necessary, facilities which commercial banks normally extend to their clients should be extended to industrial cooperative societies by cooperative banks. The cooperative banks should increasingly get all their advances for industrial purposes guaranteed under the credit guarantee scheme which is being operated by the Government of India through the Reserve Bank of India. The State Government should adopt active programmes, give priority to these programmes and find out funds for them. They should also take early action in collaboration with the Reserve Bank of India to appoint teams for preparation of specific programmes as suggested by the Second Working Group.
- (iii) The Central Government which has not taken direct part in the programme till now, should evolve a programme of its own and give a lead by providing funds for key staff and basic capital to the State and selected central cooperative banks as a catalytic agent through the National Fede-

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ration of Industrial Cooperatives. The Central Government may also provide funds for industrial wings of State and selected central cooperatives to the extent of 1 per cent of the paid up capital through the National Federation of Industrial Cooperatives and carry out viability studies in different industries.

- (iv) The Reserve Bank of India should made adequate resources available to cooperative banks to meet the legitimate demands of cooperative societies in different sectors instead of concentrating their efforts on agricultural credit alone. A wider interpretation of section 17(2)(pp) will have to be made so that the cooperative bank are reimbursed for advance made by them to industrial cooperative societies irrespective of the industry group to which they belong.
- (v) The Primary cooperative banks should expand their advances to members for industrial purposes and earmark separate funds for this purpose and in their annual budgets and programmes, and the Government should participate in the share capital of these banks, steps may also be taken to ensure that primary cooperative societies finance rural artisans as recommended by the Rural Credit Survey Report and the Second Working Group on Industrial Cooperatives.
- (vi) The State Bank of India should be encouraged to finance industrial cooperatives in those areas where cooperative banks are weak.

RESERVE BANK OF INDIA WORKING GROUP

The Reserve Bank of India (in June 1967) set up a working Group under the Chairmanship of Shri P.N.Domry, Deputy Governor, Reserve Bank of India on the commendation of the Standing Advisory Committee on Rural and Cooperative Credit of the Reserve Bank of India. The terms of reference of the Working Group were as under:

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1. To examine the existing situation regarding resources available to cooperative processing industries and cooperative cottage and small scale industries from the cooperative banking structure.
2. To identify the nature of the existing difficulties, if any, encountered by cooperative processing industries and cooperative cottage and small scale industries in getting adequate resources from the cooperative banking structure.
3. To suggest concrete measures necessary to ensure adequate flow of funds to cooperative processing industries and cooperative cottage and small scale industries on the part of the cooperative banking structure and the higher financing agencies.
4. To examine the role of urban cooperative banks in financing cottage and small scale industries, to identify the nature of existing difficulties if any, and to suggest concrete measures necessary to enable the urban cooperative banks to play a positive role in financing cottage and small scale industries.
5. To recommend measures necessary for bringing closer inter-relationship between the various types of cooperative financing agencies, e.g., State and Central Cooperative Banks. Industrial Cooperative Banks and Urban Cooperative Banks and also between the higher financing agencies and those Banks in regard to the provision of resources to cooperative processing industries and cottage and small scale industries.
6. To suggest concrete measures necessary to ensure that the State Cooperative Banks are in a position to act as promotional and financing agencies in regard to the provision of resources to cooperative processing industries and cottage and small-scale industries including the necessary working arrangement with higher financing agencies.

COTTAGE & SMALL INDUSTRY (INDIA)

Appendix P

Outlay and Expenditure in the Fourth Plan

(Rs. crores)

	Fourth Plan				
	central and centrally sponsored			states & union territories	
	outlays		estimated expenditure	outlays	estimated expenditure
	original	reappraised			
	1	2	3	4	5
1. Small scale industries	37.65	27.33	15.09	67.02	55.24
2. Industrial estates	..	..	..	18.03	15.73
3. Khadi and Village industries	95.00	111.00	99.55	1.56	3.11
4. Handloom industry				26.48	28.57
5. Powerlooms	4.50	1.10	0.64	7.67	3.26
6. Sericulture	2.00	1.30	0.94	7.94	7.45
7. Coir industry	1.50	1.00	0.78	3.51	3.71
8. Handicrafts	8.00	2.60	1.29	5.49	4.95
9. Rural industries projects ¹	4.50	9.00	10.13	..	..
10. Collection of statistics	0.60	0.60	0.57	..	..
T O T A L	153.75	153.93	128.99	138.36 +	122.02

¹ Centrally sponsored schemes.

+ Includes Rs.0.66 crores for Uttarakhand and Ladakh.

APPENDIX 'Q'

Name of Scheme/item of work	Unit	Position in March 1961	Target aimed 1951-56	Achievement Total 1951-56
1.	2.	3.	5.	5.
1. Handloom Cooperatives:				
i). Industrial cooperative	No. of members	98,141	1,03,000	95,489
ii). Marketing cooperative	"	7,180	12,000	22,383
2. Handloom—Cloth production	In lakhs of Rupees	45.79	37.00	26.07
3. Gur Development - Number trained	-	1,070	700	1,085
4. Tuitional Classes - "	-	2,903	4,163	4,007
5. Hill Wooll Scheme - "	-	34,715	65,000	48,997
6. Non-Ferrous Metal - Production	In lakhs of Rupees	-	1.12	0.74
7. Khadi Development - Number trained	-	24,112	41,000	50,757
8. Sericulture - Rearing	-	-	340	616
9. Govt. U.P. Handicrafts - Sales	In lakhs of Rupees	99.58	55.50	51.82
10. Chikan Embroidery - Production	"	2.59	4.25	4.26
11. Quality Marking-Goods Quality Marked	"			
i). Handloom		0.00	25.00	56.38
ii). Locks		0.41	5.00	7.77
iii). Footwear		-	17.80	22.19
iv). Prints		-	87.00	110.60

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APPENDIX Q--Contd.

12. Lock Scheme - Production	In lakhs of Rupees	-	0.85	0.46
13. Blanket Finishing Factory, Najibabad	-	(No physical targets have been fixed under the scheme).		
14. Demonstration Handloom Factory, Mau Yarn dyed in Ib. (in lakhs)	-	0.79	2.72	0.91
15. Cutlery Schemes	-	(No targets have been fixed under the scheme)		
16. Pottery Development--Estimated Production of finished goods by Khurja potters.	In lakhs of Rupees	-	3.10	4.29
17. Pilot workshop	Number of trained	-	101.00	75.00
18. Loans and Grants:				
i). Loans (in lakhs of Rupees)		-	10.59	21.92
ii). Grants (in lakhs of Rupees)		14.50	3.32	2.64
19. Improvement of Flaying--Training of Flayers	Number	-	1,561	1,544
20. Fruit Preservation and Canning schemes:				
i). Persons trained in fruit preservation and canning	Number	-	4,200	3,022
ii). Value of Fruit product	In lakhs of Rupees	-	60	56
iii). Cleaning of Orchard	In acres	-	15,900	10,868
iv). Treatment of diseased plants	Number	-	1,33,500	2,64,661
v). Area reclaimed for plantation	Acres	-	6,685	390

SOURCE: Progress Review of the Uttar Pradesh: First Five Year Plan, Uttar Pradesh Government, Lucknow, 1957.

APPENDIX P

OVERALL PROGRESS OF THE COOPERATIVE MOVEMENT IN THE COUNTRY AS ON 30th JUNE, 1965

S T A T E	Primary Industrial Cooperatives			Primary Weavers' Societies		
	No. of Societies	Membership	Working Capital.	No. of Societies	Membership	Working Capital
1.	2.	3.	4.	5.	6.	7.
Andhra Pradesh	2,043	36,526	17,975	1,017	2,64,848	44,897
Assam	803	16,520	2,261	1,567	38,964	2,620
Bihar	2,556	82,214	6,810	1,157	1,46,345	11,132
Gujrat	1,042	49,992	18,493	219	22,236	7,375
Jammu and Kashmir	49	2,549	891	75	3,365	511
Kerala	2,440	2,30,894	27,121	419	46,196	15,961
Madhya Pradesh	2,552	17,620	14,551	375	32,496	6,817
Madras	396	28,823	15,616	1,109	2,38,191	93,976
Maharashtra	2,274	1,01,144	37,778	787	83,619	36,263
Mysore	1,795	2,12,987	32,228	807	1,23,635	24,528
Orissa	1,120	48,637	15,136	543	56,570	11,712
Punjab	5,070	79,173	37,279	1,128	19,494	7,088
Rajasthan	2,042	38,764	8,064	1,022	30,648	7,003
Uttar Pradesh	3,235	76,099	13,582	1,577	1,14,677	15,701

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APPENDIX...contd

West Bengal	917	37,965	7,206	972	71,767	16,519
Andaman Nicobar	3	8,019	3	1	-	4
Delhi	327	2,008	21,133	90	1,978	1,174
Himachal Pradesh	20	1,419	440	2	48	29
Manipur	51	4,091	382	12	281	39
Pondicherry	245	776	789	117	6,095	403
Tripura	19	890	279	12	1,909	756
<hr/>						
TOTAL - 1964-65	29,349	10,76,110	2,78,355	13,084	13,05,525	3,05,286
TOTAL - 1961-62	22,340	11,17,169	1,70,327	12,222	12,19,953	2,20,507

SOURCE: Report to 5th Indian Cooperative Congress, New Delhi (December 2.4.1967), National Cooperative Union of India, New Delhi, p. 57,

APPENDIX 86

Handicraft Cooperative Societies in U.P.

<u>Year</u>	<u>Number</u>
1960-61	183
1965-66	413
1966-67	437
1967-68	438
1968-69	458

Sericulture industry under cooperative fold in U.P.

<u>Year</u>	<u>Number</u>
1950-51	132
1955-56	301
1960-61	32
1965-66	99
1966-67	44
1967-68	44
1968-69	44

Village Cooperative Industries U.P.

<u>Year</u>	<u>Number</u>
1955-56	249
1960-61	1,837
1965-66	3,104
1966-67	3,161
1967-68	3,171
1968-69	3,176

APPENDIX T'

COOPERATIVE FARMING — ROLE OF AGRICULTURE AND AGRO-INDUSTRIES

(Letter No. CDM-986/63, issued by the Ministry, Community Development and Cooperation, Government of India on October, 8, 1963).

The Ministry of Community Development and Cooperation and the Ministry of Food and Agriculture at the Centre had suggested to the State Government in 1961 that financial and technical assistance available to individual cultivators under various schemes viz., schematic block budget, GMF, taccavi and other agricultural schemes should flow to cooperative farming societies as a matter of priority. This approach was commended because cooperative farming is the only method by which the weaker section, i.e., the small farmers and the landless labourers can improve their economic conditions. Instructions in this regard have not been issued in most of the States or even if issued, are not being properly implemented. The position in this regard in each State may be examined and the procedure settled to ensure free flow of financial and technical assistance under various schemes to cooperative farming societies on a priority basis. The Development Commissioners may also be asked to impress on the block staff that cooperative farming forms an integral part of their functions and they should pay special attention to its development.

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For ensuring full support of the extension staff to the programme of cooperative farming action on the following lines is recommended:

- (1) The representation to the agricultural departments in the State Cooperative Farming Advisory Board should be strengthened.
- (2) The Extension Officer (Agricultural) should visit Cooperative Farming Societies in pilot projects once a month. The District Agriculture Officer should visit once a quarter. These visits should be at various stages of the agricultural operations.
- (3) An additional Agricultural Officer may be appointed at the district level, where the number of Cooperative Farming Societies is more than 50. To begin with, this should be done in intensive pilot projects districts in each State.
- (4) As in the case of IADP blocks, the requirements of Cooperative Farming Societies in respect of fertilisers, seeds, manures, etc., should be met fully on a priority basis.
- (5) As in the case of IADP blocks, concessions and facilities with regard to irrigation, sinking of tube-wells, electric connections, supply of agricultural implements and tractors should be made available to the societies by the concerned departments on a preferential basis.
- (6) Assistance for starting poultry and dairying should be given to Cooperative Farming Societies in preference to individuals.
- (7) Cooperative farms should be utilised for 'composite demonstrations' organised by the agricultural department for various purposes. They should be recognised as progressive farmers of the village and all assistance and guidance made available to them on a high priority.

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- (8) Greater attention should be paid to the organisation of agro-industries allied to agriculture. The Extension Officer (Industries) should specifically be charged with the task. Cooperative Farming Societies should take up only those activities which suit the skill and capacity of their members and have a bearing on their activities or processing of agricultural produce,

SOURCE: Cooperative Policy and Programmes (Part II): Important Letters and Schemes Relating to Cooperative Development; National Cooperative Union of India, New Delhi; 1964.

Appendix U

Showing total number of Registered Industrial Cooperatives (Except Handloom and Sericulture Cooperative Societies) and total number of members as on 31st March, 1973 and 30th September, 1973.

Sector	Total Registered Societies 30th March, 1973		Total Registered Societies 30th Sept. 1973	
	No. of Societies	No. of Members	No. of Societies	No. of Members
1. Khadi & Village Industries (Gram Udyog) Board	3917	81,073	3,968	81,863
2. Hand & Embroidery Board	626	13,868	647	14,283
3. Small Scale Industries	586	27,749	623	28,399
	TOTAL 5,129	1,22,690	5,238	1,24,545

SOURCE: Progress Report 1973-74, Development of Industries in U.P., Directorate of Industries, Kanpur, 1974 (Hindi Edition) page 81.

U. P. VILLAGE & SMALL INDUSTRIES DURING FIFTH PLAN

(Rupees in Lakhs)

[illegible]

1. HANDLOOM

A--Continuing Schemes

1. Share Capital	25.00	25.00	..	4.52	4.52	..	4.76	5.00	5.24	5.48
2. Managerial Assistance	6.00	6.00	..	2.29	..	..	1.85	1.19	0.45	0.22
3. Dye House	0.43	0.15	..	0.31	..	..	0.09	0.03	..	..
4. Design Centre	15.07	..	..	2.45	..	..	2.87	3.28	3.23	3.24
5. Weavers Seminar	6.20	..	..	1.22	..	..	1.23	1.24	1.25	1.26
6. Sales Department	1.00	0.68	0.27	0.05
7. All-India Handloom Work	0.80	0.12	0.14	0.16	0.18	0.20

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Sl. No.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
	2--POWERLOOMS											
1.	Loan for introduction of Powerlooms	33.50	33.50	10.00	13.50	10.00
2.	Others	6.50	..	..	1.00	..	..	..	1.00	1.25	1.40	1.75
	TOTAL-2	40.00	33.50	..	1.00	..	..	..	1.10	11.25	14.90	11.75
	3--SMALL-SCALE INDUSTRIES											
	A. Continuing Schemes											
1.	Share Capital to UPSCIC	35.00	35.00	..	..	..	..	..	15.00	20.00	..	..
2.	Difference in the rate of interest for supply of machinery on Hire Purchase through U.P.S.L.C.	20.00	20.00	..	3.00	3.00	..	..	4.00	4.00	4.00	5.00
3.	Participation in joint venture by U.P.S.L.C.	80.00	..	..	..	..	..	..	20.00	20.00	20.00	20.00
4.	(a) Financial Assistance (Loans) UPFC	150.00	150.00	..	46.00	46.00	..	..	29.00	25.00	25.00	25.00
5.	(b) Subsidy on interest on loan from Banks	100.00	..	..	10.00	..	..	..	15.00	20.00	25.00	30.00
5.	Product Potentiality Market Surveys	60.00	..	..	10.00	..	..	..	12.00	12.00	12.00	14.00
6.	Additional Staff CDIO etc. in backward areas.	30.00	..	..	4.00	..	..	..	6.00	6.00	7.00	7.00
	..CONTD											

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
7. (a)	Power Subsidy Scheme	110.00	..	..	8.00	..	..	25.00	25.00	25.00	27.00
(b)	25 per cent subsidy on Power generators	300.00	..	..	40.00	..	..	80.00	60.00	60.00	60.00
8.	Industrial Corporations—										
(a)	Expansion of Industrial Corporations	35.00	..	..	6.00	..	..	13.85	14.85	15.10	16.20
(b)	Share Capital Loan	30.00	..	..	6.00	6.00	..				
(c)	Construction of work-shed	10.00	..	..	3.00	..	..		
9. (a)	Ancillary Development Programme	12.00	..	..	3.00	..	..	2.80	2.00	2.10	2.10
(b)	Samples display centre	4.00	4.00	..	1.00	1.00	..	0.75	0.75	0.75	0.75
10.	Statistical and Documentation Cell	8.00	..	..	1.50	..	..	1.50	1.50	1.75	1.75
11.	Exhibitions and Fairs	20.00	..	..	3.00	..	..	4.00	4.00	4.00	5.00
12.	Expansion of Quality Marketing Scheme	10.00	1.60	..	2.00	1.60	..	1.97	2.00	2.00	2.03
13.	Subsidy on tours of entrepreneurs	1.00	..	..	0.20	..	..	0.20	0.20	0.20	0.20

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.0	12.
14.	Electronic testing and development laboratory	30.00	9.00	..	10.00	9.00	..	8.00	4.00	4.00	4.00
15.	Subsidy for preparation of Project report on Small Industries	30.00	..	..	5.00	..	..	6.00	6.00	6.00	7.00
16.	Expansion of Technical Assistances for focal growth centres	50.00	..	..	8.00	..	..	9.00	10.00	11.00	12.00
17.	Trade Centre Ghaziabad	10.00	4.5	..	2.00	2.00	..	2.00	2.00	2.00	2.00
18.	Expansion of Glass Technology Laboratory	2.00	0.24	..	0.30	0.04	..	0.40	0.42	0.43	0.45
19.	Expansion of Ceramic Centres:										
	(a) Khurja	5.00	5.00	..	2.30	2.30	..	2.70	..	..	..
	(b) Chunar	1.75	0.93	..	0.70	0.55	..	0.54	0.17	0.17	0.17
20.	Reorganization of Leather Institute	1.50	..	0.30	0.50	..	0.30	0.25	0.24	0.25	0.26
21.	Expansion of consulatory Cell	15.00	..	..	2.00	..	..	2.92	2.97	3.03	3.08
22.	Productivity Studies of S.S.I.S. through M.P.C.	3.75	..	..	0.75	..	..	0.75	0.75	0.75	0.75

...contd

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
23.	Service facility to Small Industries:										
	a) Heat Treatment Plant Meerut	40.00	..	..	4.50	..	..	8.50	8.50	9.00	9.50
	b) Tool-room Lab.Ghazisbad	3.5	..	..	0.50	..	..	0.60	0.70	0.70	0.90
24.	Provision of Transport to Z.O's and S.Z.O's		2.00	2.00	..	1.00	1.00	..	1.00	..	..
	Total	1209.50	232.27	0.3	185.25	27.49	0.3	273.73	253.05	241.33	256.14

B. New Schemes

1.	Common facility centre for finished leather	20.00	..	15.0	2.50	..	..	9.00	7.70	0.60	0.70
2.	Glass testing Laboratory Faridabad	2.75	0.40	..	0.50	0.08	..	0.54	0.56	0.57	0.58
3.	Establishment of Pottery Development Centre:										
	(a) Jhansi	4.25	2.34	..	1.50	1.50	..	0.37	0.90	0.73	0.75
	(b) Nizamabad(Azamgarh)	4.50	2.74	..	1.50	1.50	..	0.27	0.93	0.90	0.90
4.	Setting-up of planning and Evaluation cell	10.00	..	..	1.50	..	..	2.00	2.00	2.25	2.25

..contd

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11-	12.
5.	Training and reorientation Programme for officers and staff of Industries Department	10.00	..	..	1.50	..	..	2.00	2.00	2.25	2.25
6.	Organisation of Brassware Moradabad	75.00	75.00	..	25.00	25.00	..	25.00	25.00	..	..
7.	Organisation of Footwear Corporation Agra	75.00	75.00	..	25.00	25.00	..	25.00	25.00	..	..
8.	Setting up an Electronic Corporation U.P.	75.00	75.00	..	15.00	15.00	..	20.00	20.00	20.00	..
9.	Strengthening of U.P. Export Corporation	25.00	25.00	..	10.00	10.00	..	5.00	5.00	5.00	..
10.	Setting up a consultancy Corporation U.P.	50.00	50.00	..	5.00	5.00	..	20.00	15.00	10.00	..
11.(a)	Work-Study of Store-Purchase and raw materials section of the Directorate of Industries.	1.00	1.00	..	1.00	..	..	..	..	..	..
(b)	Management study of the Directorate of Industries for re-organisation through professional organisation.	1.00	1.00	..	1.00	..	..	..	..	..	..

..contd

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
12.	Revolving Building Materials Bank for new small industrial units through UPSIC (on the pattern of SICOMD)	30.00	30.00	..	5.00	5.00	..	10.00	15.00	..	..
13.	Provision of Supervisory and control staff for raw material and small scale Industrial Sector	8.00	..	..	0.75	..	..	1.25	2.00	2.00	2.00
	Total	390.50	335.48	15.0	94.75	88.08	..	120.43	121.34	44.40	9.58
	TOTAL,3	1600.00	567.75	15.30	280.0	162.82	0.3	394.16	374.39	285.73	265.72
4 INDUSTRIAL ESTATES											
1.	Continuing Schemes	20.00	20.00	..	10.00	10.00	..	10.00	..	..	..
2.	New Schemes	125.00	125.00	..	23.00	23.00	..	32.00	46.00	16.00	8.00
3.	Expansion of Staff	5.00	1.00	1.00	1.00	1.00	1.00
	TOTAL,4	150.00	145.00	..	34.00	33.00	..	43.00	47.00	17.00	9.00

...contd

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
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5--HANDICRAFTS

Continuing Schemes:

1.	Development of Handicraft Co-operative Societies and Financial Assistance	25.00	15.50	..	5.00	3.10	..	5.00	5.00	5.00	5.00
2.	Celebrating of all-India Handicraft week	1.50	..	..	0.25	..	..	0.31	0.31	0.31	0.32
3.	Common Facility Centre, Varanasi	3.50	..	..	0.75	..	..	0.68	0.68	0.68	0.71

4. Training-cum-Production Centre--

(a)	Papri Wood Centre Surgical Pauri and Shavel Weaving, Pauri	14.50	..	..	3.00	1.83	..	2.87	2.87	2.88	2.98
5.	Pilot Project Scheme for Development of Handicraft Weavers Painter Kashipur and Juspur, Naini Tal	15.00	9.98	..	2.00	0.72	..	3.25	3.25	3.25	3.25

New Schemes:

6.	Establishment of 4 Design centres Agra, Varanasi Jhansi and Lucknow	2.50	0.50	0.50	0.50	0.50	0.50
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..contd

1.	2.	3.	4.	5.	6.	7.	8.	9.	20.	11.	12.
7. Training Programme of Craftsmen & Workers		1.00	0.25	0.20	0.20	0.20	0.15
8. Publicity Schemes		1.00	..	..	0.25	..	..	0.15	0.20	0.20	0.20
9. Scheme for--											
(a) Survey & Registration		3.00	..	..	0.50	..	..	0.60	0.60	0.60	0.70
(b) Collection of Samples		3.00	..	..	0.50	..	..	0.60	0.60	0.60	0.70
10. Construction of Residence & Workshop of Handicraft Workers at Agra, Moradabad and Varanasi		10.00	2.85	..	2.00	0.75	..	2.00	2.00	2.00	2.00
Total 5		80.00	33.33	..	15.00	6.40	..	16.16	16.21	16.22	16.41

6--SERICULTURE AND TSAR SCHEME

1. Mulberry Silk Scheme	70.00	17.82	5.00	8.12	1.50	..	20.15	14.43	14.03	13.27
2. Tsar Silk Scheme	20.00	1.32	..	1.88	..	..	3.19	4.90	4.89	5.14
Total 6	90.00	19.14	5.00	10.0	1.50	..	23.34	19.33	18.92	18.41

8--KHADI AND GRAM UDYOG

1. Research & Economic Survey	3.00	0.10	..	0.66	0.10	..	0.57	0.58	0.59	0.60
2. Scheme for weaker Sections of Society	1.00	0.40	..	0.22	0.04	..	0.19	0.19	0.20	0.20
3. Regional Publicity Scheme	4.68	0.23	..	0.65	0.23	..	1.03	0.99	0.99	1.02

..contd

1.	2.	3	4	5	6	7	8	9	10	11	12
8.	Marketing Subsidy	50.00	..	..	20.00	..	..	9.85	10.15	10.33	10.65
9.	Publicity and Advertisement	2.00	..	..	0.20	..	..	0.30	0.40	0.50	0.60
10.	Weavers Tour	2.50	..	..	0.50	..	..	0.50	0.50	0.50	0.50
11.	R.B. of Interest	10.00	..	..	1.20	..	..	1.50	1.90	2.40	3.00
12.	R.B. Guarantee	1.00	..	..	0.20	..	..	0.20	0.20	0.20	0.20
13.	R.B. of Staff	3.00	..	..	1.10	..	..	1.20	0.30	0.20	0.20
14.	Quality Making of H.L. Fabrics	10.00	..	..	1.76	..	..	1.85	1.95	2.14	2.30
15.	Assistance to H.L. Corporation	300.00	300.00	..	47.00	47.00	..	75.00	75.00	50.00	45.00
Total		433.00	325.15	..	83.55	51.52	..	101.61	101.35	76.64	72.85
B. New Schemes											
1.	H.L./P.S. Survey	3.80	..	..	0.70	..	..	9.73	0.76	0.79	0.82
2.	Testing Laboratory	12.00	9.00	..	0.01	..	..	4.00	5.00	2.00	0.09
3.	Organisation of S. Staff.	50.20	..	..	5.54	..	..	10.19	10.34	10.49	10.64
4.	Training of Staff	1.00	..	..	0.20	..	..	0.20	0.20	0.20	0.20
Total		67.00	9.00	..	6.45	..	..	15.12	16.30	13.48	12.65
TOTAL, I		500.00	334.15	..	90.00	51.52	..	116.73	117.65	190.12	85.50

..CONTD

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
4.	Blanket Scheme	11.46	5.20	..	3.09	2.81	..	3.42	1.60	1.65	1.70
5.	Match Box Scheme	3.00	1.00	..	1.22	0.50	..	0.42	0.44	0.45	0.47
6.	Sale-development Scheme	4.32	1.53	..	1.88	0.53	..	0.59	0.60	0.62	0.63
7.	Exhibition and Publicity	4.04	..	..	0.80	..	..	0.80	0.81	0.81	0.82
8.	Fibre Industry	1.50	0.11	..	0.31	0.06	..	0.32	0.28	0.29	0.30
9.	Soap Industry	1.00	..	..	0.11	..	..	0.21	0.22	0.23	0.23
10.	Hand Paper Industry	2.00	..	..	0.38	..	..	0.39	0.40	0.41	0.42
11.	Gobar Gas Scheme	1.00	..	..	0.18	..	..	0.20	0.20	0.21	0.21
12.	Hill Wool Scheme	3.00	3.00	..	0.50	0.50	..	1.00	1.00	0.25	0.25
Total, 7		40.00	11.21	..	10.00	4.77	..	9.14	7.31	6.70	6.85

Total, for the Sector--3.3
 Village and Small Indust- 2500.00 1144.08 20.3 440.0 260.01 0.30 603.63 593.14 449.59 413.64
 ries.

SOURCE: Fifth Five Year Plan, Uttar Pradesh, Annual Plan, 1974-75, Planning Department
 Uttar Pradesh, pp.

APPENDIX...

	IMPORTS OF FOODGRAINS										(Thousand tonnes)
	1965	1966	1967	1968	1969	1970	1971	1972			
Cereals											
Rice	783	787	453	446	487	206	240	131			
wheat and wheat flour	6,583	7,832	6,400	4,766	3,090	3,425	1,814	315			
Other cereals	96	1,739	1,819	482	295	-	-	-			
Total	7,462	10,358	8,672	5,694	3,872	3,631	2,054	446			

SOURCE :- India 1974, Publication Division, Ministry of Information and Broadcasting, Government of India, New Delhi, Page 176.

APPENDIX

PRODUCTION OF FOODGRAINS

	<u>Area '000 Hectares</u>	<u>Production '000 Tonnes</u>	<u>Yield in Kg/Hec.</u>
INDIA			
1969-70	1,23,570	99,501	8,050
1970-71	1,24,316	1,08,422	872
1971-72	1,22,623	1,05,168	858
1972-73	1,19,277	97,026	813
1973-74	1,26,128	1,03,611	821
UTTAR PRADESH			
1969-70	19,428	17,547	903
1970-71	19,631	18,585	998
1971-72	19,359	17,697	914
1972-73	19,357	18,154	938
1973-74	19,233	15,729	818

Compiled by the author from the data provided
by the Ministry of Food, Agriculture, Community
Development & Cooperation (Ex.Div.) New, Delhi,
Typed Manuscript, 1975.

APPENDIX

FOODGRAINS PRODUCTION IN U.P. & INDIA

<u>Uttar Pradesh</u>	<u>Area, 000 Hectares.</u>	<u>Production .000 Tonnes.</u>	<u>Yield in Kg./Hec.</u>
1969-70	19428	17547	903
1970-71	19631	19585	998
1971-72	19359	17697	914
1972-73	19357	18154	938
1973-74	19233	15729	818
<u>ALL INDIA.</u>			
1969-70	123570	99501	8050
1970-71	124316	108422	872
1971-72	122623	105168	858
1972-73	119277	97026	813
1973-74	126128	103611	821

Completed by the author from the data provided
by the Ministry of Food, Agriculture, Community Development
& Cooperation (Ex.Div.) New Delhi, Typed Manuscript, 1975.

APPENDIX

	<u>U T T A R P R A D E S H</u>		
	<u>Total area</u>	<u>Irrigated area</u>	<u>H.V.P. area.</u>
Rice	4563	764	677
Wheat	5907	3996	1938
Jowar	734	7	1
Bajra	1121	5	30
Maize	1508	251	63
Ragi	251	12	-
Barley	1323	737	-
Total Cereals	15906	5808	-
Pulses	3725	1006	-
Total- foodgrains	19631	6814	2709
All India	101782	28583	

SCURCE: Compiled by the author from the records of the
Department of Agriculture, (Ex. Div.) Govt. of
India, New Delhi.

APPENDIX

FOURTH FIVE YEAR PLAN SELECTED PROGRAMMES, TARGETS AND ACHIEVEMENTS

Item	Unit	Fourth Plan	Actual Achievement					Anticipated Achievement		
			Assumed base level	Targeted level for 1973-74	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9	10	
High Yielding Varieties: Lakh Hectares										
Paddy	-do-	3.44	10.15	3.31	5.61	6.77	9.94	9.25	10.15	
Wheat	-do-	12.14	23.85	13.58	16.40	19.38	22.00	32.00	34.00	
Maize	-do-	0.30	0.40	0.85	0.81	0.63	0.16	0.20	0.20	
Jowar	-do-	0.07	0.08	0.08	0.07	0.01	0.01	0.02	0.03	
Bajra	-do-	0.20	0.24	0.10	0.22	0.30	0.40	0.30	0.40	
Total		16.15	34.72	17.92	23.11	27.09	32.51	41.77	44.78	

SOURCE:- Fifth Five Year Plan, Annual Plan, 1974-75, Government of Uttar Pradesh, Planning Department, January 1974, Page 26.

APPENDIX

FOURTH FIVE YEAR PLAN SELECTED PROGRAMMES, TARGETS AND ACHIEVEMENTS

Item	Unit	Fourth Plan	Actual Achievement					Anticipated Achievement		
			Assumed base level	Targeted level for 1973-74	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9	10	
Consumption of Chemical Fertilizers	Lakh tonnes									
Nitrogen (in terms of N)	-do-	2.00	5.50	2.20	3.06	2.91	3.38	3.73	4.21	
Phosphate (in terms of P ₂ O ₅)	-do-	0.50	2.20	0.77	0.99	0.75	0.73	0.87	1.03	
Potassic (in terms of K ₂ O)	-do-	0.36	1.60	0.42	0.55	0.45	0.53	0.52	0.73	
Total		2.86	9.30	3.39	4.60	4.11	4.64	5.12	5.97	

SOURCE: Fifth Five Year Plan, Annual Plan, 1974-75, Government of Uttar Pradesh, Planning Department, January 1974, Page 26.

APPENDIX...

Item	Unit	Fifth plan base level	Fifth Plan target	Target for 1974-75
1	2	3	4	5
Short and Medium term Agricultural Credit:-				
Advance during the year by Co-operatives.	Rs. in crores	59	55	11
Advance by Commercial Bank during the year	-do-	..	...	..
Investment Agricultural Credit:-				
Medium term advances by Co-operatives during the 5 years of the Plan.	-do-	35	25	5
Medium-long term advances by Commercial Banks during 5 years of the Plan.	-do-	..	..	.
Long-term advances by land development Banks during 5 years of Plan	-do-	126	190	38

SOURCE: Fifth Five Year Plan, Annual Plan, 1974-75, Government of Uttar Pradesh,
Planning Department, January 1974 Page 31.

TABLE
APPENDIX

FOURTH PLAN TARGETS AND ACHIEVEMENTS AND FIFTH PLAN
TARGETS OF CROP PRODUCTION

Crop.	Unit.	IV Plan target	Estimated achievement 1973-74	V Plan target	IV Plan targett ed growth rate.	V Plan targett ed growth rate.
1. Rice	M. tonnes	52	44.0	54.0	5.9	4.2
2. Wheat	"	24	30.0	38.0	5.9	4.8
3. Maize	"	8	6.5	8.0	5.2	4.2
4. Jowar	"	13	9.5	11.0	8.5	3.0
5. Bajra	"	7	6.5	8.0	6.5	4.2
6. Other cereals	"	8	6.0	7.0	2.1	-
7. Pulses	"	15	11.5	14.0	3.7	4.0
8. Total goodgrains	"	129	114.0	140.0	5.6	4.2
9. Oilseeds	"	10.5	9.4	12.5	4.3	5.8
10. Sugarcane	"	150.0	134.0	170.0	4.6	4.9
11. Cotton	lakh bales	80	65.0	80.0	5.9	4.3
12. Jute and Mesta	"	74	67.0	77.0	3.6	2.9

SOURCE : By courtesy of Mr.H.Luqman, Deptt. of Agriculture
(Ex.Div.) Ministry of Food, Agriculture, Community
Development and Cooperation, Govt. of India, New Delhi
(type manuscript)

APPENDIX

India/State Union Territory & Other Area	Total Rural Urban	Area Kms (000s)	Population		Density of Population Per Km.	
			Persons	Male		Female
1.	2.	3.	4.	5.	6.	7.
India	Total	3,200	547,367,926	283,252,214	264,115,712	182
	Rural		43,858,084	224,729,393	213,851,451	
	Urban		108,787,082	58,522,821	50,264,261	
U.P.	Total	294	88,364,779	46,922,872	41,441,907	300
	Rural		75,996,292	40,130,724	35,865,568	
	Urban		12,368,487	6,792,148	5,576,339	
Aligarh	Total	5.0	2,113,747	1,149,469	964,278	421
	Rural		1,740,653	946,360	794,293	
	Urban		373,094	203,109	169,985	

APPENDIX Contd....

Female per 1,000 males	Percentage growth rate of population 1961-71	Literate Population		Literates as per cent of total population	
		Persons	Male	Female	Per- sons
832	+ 24.66	160,610,191	111,911,000	48,699,191	29.34
952	+ 21.78	103,520,662	75,889,172	27,631,490	23.60
859	+ 37.83	57,089,529	36,021,828	21,067,701	52.48
883	+ 19.82	19,123,468	14,903,166	4,220,302	21.64
894	+ 18.25	13,696,956	11,331,807	2,365,149	18.02
821	+ 30.47	5,426,512	3,571,359	1,855,153	43.87
839	+ 19.74	519,452	406,036	113,416	24.57
839	+ 17.72	366,537	305,741	60,796	21.06
837	+ 30.13	152,915	100,295	52,620	40.99

APPENDIX contd.....

Total Workers				Non-Workers	
Persons	Males	Females	Persons	Male	Female
16.	17.	18.	19.	20.	21.
183,605,325	148,789,976	34,815,349	363,762,601	134,462,238	229,300,363
151,448,389	120,335,997	31,112,392	287,132,455	104,393,396	182,739,059
32,156,936	28,453,979	3,702,957	76,630,446	30,068,842	46,561,304
28,416,871	24,777,359	3,639,512	59,947,908	22,145,513	37,802,395
24,902,712	21,490,022	3,412,690	51,093,580	18,640,703	32,452,878
3,414,159	3,287,337	226,822	6,124,328	3,504,811	5,349,517
595,596	566,331	28,265	1,518,151	582,138	936,013
496,404	472,773	23,631	1,244,249	473,587	770,662
99,192	94,558	4,634	273,902	108,551	165,351

..contd

APPENDIX Contd....

Workers as percentage of Total Population.		Cultivators		Agricultural Labour		Other Workers	
Persons	Males	Females	Males	Females	Males	Females	
22.	23.	24.	25.	26.	27.	28.	29.
33.54	52.53	13.18	68,965,776	9,741,100	31,312,812	15,991,996	48,511,388
34.53	53.55	14.55	67,453,243	9,599,888	28,983,858	15,416,043	22,898,896
29.56	48.62	7.37	1,512,533	141,212	1,328,954	575,953	25,612,492
32.16	52.80	8.78	14,644,676	1,265,915	4,196,029	1,301,288	5,936,654
32.77	53.55	9.52	14,456,795	1,258,923	4,058,839	1,287,653	2,974,388
28.41	43.40	5.07	187,881	6,992	137,190	13,635	2,962,226
28.18	49.36	2.93	282,030	5,100	107,712	2,681	177,589
28.52	49.96	2.98	278,181	5,010	103,336	2,561	91,256
26.59	46.50	2.73	3,849	90	4,376	120	86,333

SOURCE: Census of India, 1971, Pages 76, 79, 150 & 151.

A P P E N D I X

NATIONAL INCOME ACCORDING TO MAJOR HEADS AT CURRENT AND CONSTANT PRICES

(in crores of rupees)

I n d u s t r y	1960-61		1965-66		1968-69*		1969-70*	
	A	B	A	B	A	B	A	B
1	2	3	4	5	6	7	8	9
Agriculture Forestry & Logging & Fishing	6,821	6,821	9,945	6,464	14,502	7,544	15,615	7925
	(51.3)	(51.3)	(48.2)	(43.0)	(50.6)	(44.2)	(50.1)	(44.1)
Mining, Manufacturing	2,688	2,688	4,384	3,612	5,596	3,490	6,267	4159
Construction and Electricity, Gas and Water supply	(20.2)	(20.2)	(21.3)	(24.1)	(19.5)	(23.1)	(20.1)	(23.2)
Transport Communication and Commerce	1,870	1,870	3,165	2,463	4,445	2,740	4,794	2883
	(14.1)	(14.1)	(15.3)	(16.4)	(15.5)	(16.1)	(15.4)	(16.1)
Other Services**	1,987	1,987	3,292	2,634	4,393	3,009	4,757	3165
	(14.9)	(14.9)	(16.0)	(17.5)	(15.3)	(17.6)	(15.2)	(17.6)
Net Domestic Product	13,366	13,366	20,786	15,173	28,936	17,233	31,432	18132
	(100.5)	(100.5)	(100.8)	(101.0)	(100.9)	(101.0)	(100.8)	(101.0)
Net Factor Income from Abroad	(-)72	(-)72	(-)165	(-)152	(-)258	(-)176	(-)258	(-)17
	(-0.5)	(-0.5)	(-0.8)	(-1.0)	(-0.9)	(-1.0)	(-0.8)	(-1.0)
Net National Product at Factor Cost	13,294	13,294	20,621	15,021	28,678	17,057	31,174	17955
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Per capita income (in Rupees)	306.3	306.3	426.1	310.4	554.7	329.9	589.3	339.4

*Provisional A-At current prices B-At constant (1960-61) prices

**Comprising banking & insurance, real estate and ownership of dwellings and public administration and defence and other services.

Note: Figures in brackets are percentages to Net National Product.

Source : Estimates of National Product (Revised Series) 1971, issued by the Central Statistical Organisation.

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EXPLANATION

Pacca	...	Made of kiln bricks
Seer	...	Equal to 1/40 maund
Sir land	...	The land under personal cultivation which was recognised as personally cultivated under the provision of the various tenancy Acts.

CONVERSION FACTORS

1 acre	=	4,840 sq.yds.	1 hectare	=	2.47109 acres
	=	0.40568564 hectare		=	100 acres
1 sq. mile	=	640 acres	1 acre	=	100 sq. metres
	=	2.589988 sq.m	1 sq. kilometre	=	0.386101 sq mile
		kilometres		=	100 hectares
	=	258.9988 hectares			
1 sq.yed.	=	0.836127 sq. metre			

WEIGHT

1 md.	=	82.285714 Lbs.	1 lb.	=	0.453592 kgm.
	=	0.373242 quintal	1 cwt.	=	0.508023 quintal
	=	0.0373242 metric ton.			
1 gm.	=	0.0352740 ounce	1 kgm.	=	2.20463 lbs.
	=	0.085735 tola			
1 quintal	=	2.67923 mds.			

1 metric ton	=	0.98420 ton
	=	26.7923 mds.
	=	10 quintals
	=	1.000 kgs.
1 crore	.....	10 million
1 lakh	.....	1/10 of a million
₹ (U.S.)	.....	Rs. 7.50
₹ (U.S.)	.....	90 kopek
One Ruble	.....	100 kopek
One Rupee	.....	100 paise

B

GLOSSARY

Terms		English Equivalents
CROP SEASONS:		
Kharif	...	Summer, July-October
Rabi	...	Winter, November-April
Zaid	...	Mid-summer — Mid-winter January-June
CROPS:		
		Botanical Names
Bajra	...	Millet Pennisetum typhoideum
Gram	...	Horse gram, cicer arietinum
Juar	...	Sorghum vulgare
Maize	...	Corn, zea mays.
Mustard	...	Brassica species
Sannhemp	...	Crotalaria juncea
Jute	...	Corchorus species
Desi plough	...	Country plough
Gur	...	Jaggery
Kaccha	...	Made of mud or sun dried bricks
Khadar	...	Low lying land adjacent to the river
Khandsari	...	bed generally subject to flood Indigenous process of manufacturing sugar from rab (boiled can juice) with centrifugal machine or by a hand.
Maund	...	A measure for weight, equal to 82.2/7 lbs.